

The Main Policies of International Oil Companies (IOCs) in Petroleum Contracts: an Overview on Risk Service Contracts in Iran's Upstream Oil Industry

Mohammad Ali Bahmaei¹ and Ehsan Afshar^{2*}

¹ Professor, Faculty of Law, Shahid Beheshti University, Tehran, Iran

² Ph.D. Student, University of Shahid Beheshti, Tehran, Iran

Highlights

- IPC is a risk service contract that, rather than buy-backs, has made many improvements to attracting oil companies to Iran's long-standing oil industry; however, it is still insufficient to meaningfully alter the pace of foreign investment into Iran's upstream oil industry compared to common internationally used contracts in the world.
- IPC has several disadvantages such as inter alia, reserve booking, recovery, and payment ceiling and JMC, which reduce commercial attractiveness of this model.
- Favorable fiscal and good governance project structures are the most important in an oil and gas contract for international oil companies (IOCs).
- Concessions and PSA are more favorable regimes for IOCs.

Received: February 12, 2024; revised: April 12, 2024; accepted: May 05, 2024

Abstract

Host countries invite international oil companies (IOCs) to conduct petroleum operations because the industry is naturally highly costly, highly risky, and long term. Most governments do not wish to risk their own capital and are better off avoiding the significant costs, risks, and uncertainties associated with petroleum operations. In business relationships in the oil industry, IOCs enjoy a high degree of technologies, skills, and enough capitals often not available to the host countries; they are also better positioned to implement operations and take the risks if their policies are greatly achieved. IOCs follow their own policies and seek to obtain the most commercial and legal advantages such as reserve booking, high percentage of rate of return, assignment of their contractual rights and obligations, independent governing laws and dispute settlement, and good governance of the project structure. The main objective of this paper is to enumerate the key golden rules for which IOCs are looking in their business with the host countries or the NOCs. Thus, we will figure out to what extent IOC's rules are satisfied in Iran's service contracts (buy-back and IPC). According to our findings, although new Iran's Petroleum Contract (IPC) improves the buy-back's terms and structure, such as the remuneration for production on a per barrel basis, there are numerous weaknesses and other features that put IPC and buy-backs, as the risk service contracts, into the last IOC's preference among other contractual regimes in the world.

Keywords: Iran Petroleum Contract (IPC), Buyback, Production Sharing Contract (PSC), International Oil Company (IOC)

How to cite this article

Afshar, E., and Bahmaei, M.A., *The Main Policies of International Oil Companies (IOCs) in Petroleum Contracts: an Overview on Risk Service Contracts in Iran's Upstream Oil Industry*, *Petroleum Business Review*, Vol. 8, No. 2, p. 83–103, 2024. DOI: 10.22050/pbr.2024.442677.1329

* Corresponding author:

Email: ehsan.afshar@iranlng.ir

1. Introduction

Oil and gas projects are expensive and usually require a significant amount of investment, expertise, and highly developed technology in the early stages. Particularly in the countries with underdeveloped economies, host nations may depend upon foreign investors to develop the technology, put the relevant infrastructure in place, and set forth the capital necessary to carry out a major project. Although the aim of a foreign investment is to export the profits generated from the development and extraction of natural resources, the countries with underdeveloped economies may nonetheless turn to foreign investment as a necessary means to develop their own natural resources and attract the required technology and personnel to do so (Smith et al., 2010).

In order to attract investors to their petroleum industry, the host governments shall prepare a suitable environment for the international oil companies (IOCs) with enough money, well-known technology, and management skills to invest and share their capabilities with national oil companies.

Generally, the three main non-contractual and contractual regimes for making a bond between the host state or National Oil Company (NOC) and oil companies in the world are concession, production sharing agreement (PSA), and service contract. The fiscal regime, ownership of well-head or oil in-situ, and the level of monitoring by the government distinguish these models from each other.

From the commercial side, the formula for IOCs in the oil industry is fairly straightforward. They want to make as much money as possible in petroleum relationships with the host states. In consideration of providing capital, technical, and management skills in search of petroleum, IOCs intend to be able to recover their costs if petroleum is discovered in commercial quantities and sufficient revenues are generated. Further, they should receive a fair share of profits proportionately with the risks incurred during the project lifespan.

Additionally, IOCs intend to monetize the entitlements in the oil markets and report to their shareholders as an asset. Also, they like to be authorized to carry out the project with more freedom of action with due regard to the upstream principles and practices of the host government. Legally, they focus heavily on the possibility of referring to a fair and equitable dispute resolution.

In Iran, under the Petroleum Act of 1974 and in compliance with the Islamic Republic of Iran's Constitution, the service contracts were introduced as the only permitted contractual framework for upstream oil industry, and granting concession and concluding any other contractual models such as joint ventures in the upstream oil industry became forbidden. The model has been used in the industry for over two decades. However, this model is regarded by many as being uncommercial, and participating IOCs do not usually commit significant resources to the sector or undertake riskier developments. As a result, the buy-back contract could not be relied on to attract the financial resources and technology transfer required to expand the sector.

On August 2016, after signing Joint Comprehensive Plan of Action (JCPOA) between Islamic Republic of Iran and P5+1 powers and with the hope of lifting all sanctions imposed on Iran's petroleum industry, the Cabinet of Ministers passed a by-law to approve the "general terms, structure, and model" of the Iran Petroleum Contract (IPC). These general terms are the key terms which provide the legal framework for and will govern IPCs. The IPC makes various key changes to the buy-back contract in order to attract foreign investment in the industry since it has main disadvantages and buy backs are not sufficiently investable and desirable to IOCs for their long presence in upstream oil industry (Brexendorff et al., 2009; Bunter, 2009; Zhuo Feng et al., 2014; Willem JH Van Groenendaal and Mohammad Mazraati, 2006).

The structure of the IPC is also a risk-based service contract, so it initially appears to be similar to the buy-back structure. However, a number of key changes have been made to address many of the previous concerns IOCs have in relation to buy back contracts. Although IPC certainly improves the investment conditions for IOCs in many areas compared to buy-backs like the longer term and eliminating cap on costs and fee per barrel, there are numerous weaknesses and other features that put IPC and buy-backs, as the risk service contracts, into the last IOC's preference among other contractual regimes in the world.

With the above in mind, the main objective of this work is to enumerate the key golden rules for which IOCs are looking in their business with the host countries or the NOCs. We also intend to determine to what extent IOC's rules are satisfied in Iran's service contracts (buy-back and IPC). The paper is divided into four main parts. Part I sets out the key legal and commercial rules followed by IOCs in the petroleum contracts. The second part describes the buy-back and IPC structure. In this section, the fiscal regime of these two models, including petroleum costs, the contractor's fee, and the mechanism by which costs are recouped and the fee is paid, will be studied. The level of satisfaction of IOCs rules in the two mentioned contracts will be addressed in part III. Finally, we will review and answer the following question: Which regime type is the best: PSA, concession, or service contract?

2. What IOCs are looking for?

The formula for IOCs is fairly straightforward. They, in international oil industry, are to make money. In order to reach such a goal, they provide host governments with capital and their management and technical skills in search of petroleum. In consideration, oil companies look for a balanced, fair, and reasonable business deal (Peter Roberts, 2016). They seek for some main advantages in petroleum contracts with the host states. Such advantages can be categorized in two main provisions which will be examined and reviewed below: commercial and legal.

2.1. Commercial provisions

These terms elaborate on and are linked to most of the fiscal and contractual elements that consider how costs are incurred and will be recovered and, more importantly, how profits are shared. In this respect, such terms can be listed into the below items.

2.1.1. Reserve booking right

The book value of reserves and resources, i.e., the number of hydrocarbons that can be economically recovered from the field, represents the percentage of petroleum to which the IOCs are entitled to receive in kind and can be legally reported to their shareholders. For private oil companies, potential ownership of the barrel at the delivery point is referred to as the ability to book reserves. The term "book" means that the company in question has rights to take delivery of and sell the production in question to third parties, so it can report these barrels as part of its aggregate reported production. Once reserves are booked, they fall onto the balance sheet of an oil company as an increase in the asset base or a replacement of produced assets. This is attractive for investors and can consequently increase shareholders' value, something most upstream oil and gas managements consider significant at a strategic level when making investment decisions; hence, they prefer to book as many barrels as possible (Philip Daniel and Charles McPherson, 2010).

2.1.2. Favorable fiscal regime: cost recovery and fair share of profit

If petroleum is developed and sufficient revenues are generated, IOCs should be able to recover their costs and receive a share of profit proportionately with the risks incurred (Peter Roberts, 2016). Under

the typical contractual systems, the oil company is appointed by the government as a contractor for operations on a certain area. The title to the hydrocarbons remains with the state, and all production belongs to the government unless it is explicitly shared, while the IOC executes petroleum operations in accordance with the terms of the contract and operates at its own risk and expense under the control of the government. The IOC also provides all the financing and technology required for the operation. The two parties agree that the contractor will meet the exploration and development costs in return for a share of production or a cash fee for this service, if production is successful.

If the company receives a share of production (after the deduction of the government share), the system is known as a production sharing contract (PSC), also known as a production sharing agreement, which is a binding commercial contract between an investor (the IOC) and a state (national oil company). A PSC defines the conditions for the exploration and development of natural resources from a specific area over a designated period of time (Ratko Brnabic, 2016). Under a PSC, as the company is rewarded in physical barrels, it takes title to that share of petroleum extracted at the delivery point and or at the export point from the contract area (Mark Hammerson, 2011; Paul Michael Blyschak, 2010; Bernard Taverne, 1996; Martyn R David (ed), 1996; Paul Michael Blyschak, 2010; Peter D Cameron, 2010).

If the IOC is paid a fee (often subject to taxes) for conducting production operations, the system is known as a service contract, also called a risk service contract. The latter is so called because the host government or its national oil company hires the services of an international oil company, and in the case of commercial production from the contractual area, the oil company is paid in cash for its services without taking title to any petroleum extracted. A distinction is sometimes made between service contracts and risk service contracts. The former is simply based on defined compensation for a specific task, while the latter may involve additional risk being taken by the contractor to which a variable fee may be applicable (Peter D Cameron, 2010; Ernest E Smith, 2013).

While some service contracts are disguised PSCs, especially with regard to the ownership of the resource, the main differences between the two contract forms are the remuneration of the contractor and the control over operations.

RSCs provide for IOCs to receive none of the production; IOCs receive cash only. Their share of revenue is generally calculated on the same basis as the share of production calculated under PSA. IOCs may, or may not, have the right to buy a certain amount of the production.

2.2. Legal provisions

As explained above, commercial terms are central issues for IOCs in their negotiations with the host states. If IOCs are favored by the commercial terms, the legal terms are the final order of business. However, from the legal point of view, they focus heavily on issues given below.

2.2.1. Stable contract

Oil-producing countries enter investment contracts with foreign investors to improve the level of production of their oil fields due to the lack of expertise and capital. Due to the nature of petroleum agreements, the risk involved, and the amount of funding required to carry out exploration and exploitation of a particular oil fields, foreign investors are extremely careful of investing. The degree of stability is important to foreign investor because the less stable an investor perceives a project to be the less interested it is to enter a long-term contract.

All the petroleum contracts are long-term agreements that cover long-time periods. It comes as no surprise that much may change with time, especially in developing countries. Governments may change their policy which might have a significant impact on the investor, or even directly interfere with the

long-term agreements. As a result, there is a need to offer investors some protection from hazard of the business and significant changes in the future unforeseen circumstances. Stabilization clauses are often resorted to for such protection (Maniruzzaman, 2008).

By a stabilization clause, the government accepts that the exercise of its legislative and administrative powers will not have the effect of modifying the contractual conditions agreed with the investor to the latter's detriment. As such, this clause reinforces the principle of the sanctity of contracts by protecting only the private party against actions of the state party (Piero Bernardini, 2008).

For example, in this context, the petroleum production sharing agreement of November 10, 1995 between the State Oil Company of Azerbaijan and a Consortium of Oil Companies stipulates that:

The rights and interests accruing to the contractor or its assignees under this agreement and its sub-contractors under this agreement shall not be amended, modified, or reduced without the prior consent of the contractor. In the event that any government authority invokes any present or future law, treaty, intergovernmental agreement, decree, or administrative order which contravenes the provisions of this agreement or adversely or positively affects the rights or interests of the contractor hereunder, including, but not limited to, any changes in tax legislation, regulations, or administrative practice, or jurisdictional changes pertaining to the contract area, the terms of this agreement shall be adjusted to re-establish the economic equilibrium of the parties. If the rights or interests of the contractor have been adversely affected, then the state entity shall indemnify the contractor and its assignees for any disbenefit, deterioration in economic circumstances, loss or damages that ensue therefrom. The state entity shall within the full limits of its authority use its reasonable lawful endeavors to ensure that the appropriate governmental authorities will take appropriate measures to resolve promptly in accordance with the foregoing principles any conflict or anomaly between any such treaty, intergovernmental agreement, law decree, or administrative order and this agreement.

The stabilization clauses, often called the stability clauses, are inserted in most petroleum and exploration contracts entered by the host state who owns the resources and a foreign investor to avert any party from taking independent decisions to alter, abrogate, or terminate the contract entered by both parties. For example, a production sharing contract between Pertamina and Conoco provides: This contract shall not be annulled, amended, or modified in any respect except by the mutual consent in writing of the parties.

The stabilization clauses also indicated in the joint venture agreement between the National Iranian Oil Company (NIOC) and Sapphire International Petroleums Ltd. Article 45 of this agreement provides that "the provisions of the Mining Act of 1957 shall not be applicable to this Agreement, and any other laws or regulations which may be wholly or partly inconsistent with the provisions of this Agreement shall, to the extent of such inconsistency, be of no effect in respect to the provisions of this Agreement". The similar provision is included in Article 39 of the law related to the exploration, extraction, and exploitation agreement of oil between the NIOC and Italian company Agip Mineraria approved on August 24, 1957.

As a final point, IOCs can therefore reduce their risk by including in their contracts clauses like international arbitration, choice of law, and stabilization clauses.

2.2.2. An independent governing law and a fair and equitable dispute resolution

Oil and gas projects are typically large-scale, long-term, and capital-intensive with an average life span ranging from 10 to 40 years. The long-term nature of oil and gas projects, coupled with the significant upfront investments that they might require, increases the industry's exposure to a wide range of risks,

including geological, technical, political, environmental, operational, legal, and economic risks (Simon Vorburger and Angelina M Petti, 2018).

The industry's wide international exposure and constantly changing landscape leave it particularly vulnerable to disputes. The risks associated with disputes can be mitigated by parties utilizing governing law and dispute resolution clauses in contractual agreements within the sector.

Additionally, the states play a meaningful role in the sector, both as the owners of natural resources (in most cases) and as regulators. Although petroleum products drive the development of global economies, resources are fairly sparse, and the owners of natural resources are often in a position to dictate terms of petroleum agreements, which may lead to a misbalance of interests, thereby incentivizing disputes. Further, the complicated terms and multilayered structure of oil and gas transactions increase the possibility of disagreements between players at all levels. Finally, international oil and gas operations tend to involve multiple parties, often of different jurisdictions. This wide international exposure may cause an immense level of uncertainty, particularly with regard to the development of extensive infrastructure (Eduardo et al., 2022).

Given the above-mentioned reasons, in an international petroleum contract, disputes are unavoidable but unfortunate parts of business and investment life. Parties to the upstream agreements need to understand the strategic importance of the choice of law and dispute resolution clauses. While a state party naturally insists that a contract is governed by its own law, the investors have progressively sought to protect themselves from the associated risks by establishing, at least in some measure, "an extraterritorial or enclave status" by way of references to international principles and/or laws (Roland Brown, 1976). Regarding the long-term and international nature of oil and gas agreements, the parties to such agreements are typically not able to foresee anything about their future relationship. Therefore, the choice of applicable law for filling the gaps in an incomplete contract is highly important (Abba Kolo and Thomas Walde, 2003; Michael Polkinghorne and Courtney Kirkman, 2011).

In this respect, the application of a neutral system of law and often well-developed jurisdiction represents the most commercially appealing choice for the contracting parties. This is primarily because a neutral law maintains a fair balance between the parties' interests and ensures that neither party takes advantage of its national law to the detriment of another (Peter Roberts, 2017). For instance, the Kurdistan Regional Government (KRG) issued a Model PSA providing for English law as the applicable law*. Likewise, English law governs the majority of Nigerian Joint Venture Agreements (JVAs) and service contracts involving foreign oil and gas companies but to which the Nigerian government (and its agencies) are not a party. As another example, petroleum contracts in Azerbaijan refer to their national legal system complemented by English and/or Canadian law, combined with some international legal principles (Eduardo et al., 2022). As a nation-based applicable law, the Iraqi draft model technical service contract, dated November 2008, in Article 37 stipulates that "This Contract and the rights and obligations of the Parties shall be governed, interpreted, construed, and determined in accordance with the laws of the Republic of Iraq" (Pedro van Meurs, 2009).

In oil and gas projects, contractual disputes in the upstream sector may also concern the validity, execution, and/or interpretation of contractual provisions. Such international disputes between the host countries and IOCs can be resolved through mediation, conciliation, arbitration, use of good experts, and judicial systems. Although some disputes are resolved amicably, others cannot be resolved without the support of an impartial third party. In the worst-case scenario, some resort to war. When a contract

* KRG Production Sharing Contract (2007), Art. 43.1 available at <https://www.resourcecontracts.org/contract/ocds-591adf-6005604716/download/pdf> accessed 29 June 2021.

is negotiated, attention should therefore be given to the most appropriate mechanisms of resolving any future disputes. Therefore, there is a need to find a neutral ground for settling such contractual disagreements (Bayuasi Nammei Luki and Nusrat-Jahan Abubakar, 2016).

International arbitration is one of the mechanisms in settling contractual disputes, and it is considered a fair and efficient way of mitigating risk associated with international business transactions and investments. Arbitration is a legal binding and enforceable form of dispute resolution and a private alternative use in the settlement of contractual disputes. This mechanism can be differentiated from the court systems based on its private nature and from other alternative resolutions, such as recourse to an expert and conciliation, through its enforcement and binding element that is associated with the final decision of the arbitral tribunal (Bayuasi Nammei Luki and Nusrat-Jahan Abubakar, 2016).

Recourse to a national court to address any contractual disputes between these parties means that the national court should be a foreign court to the other party. These courts have their own rules, formalities, and procedures designed to deal with domestic issues and may not have the competence and experience to handle complicated international petroleum cases. Since most oil and gas contracts are international in nature, arbitration is suitable as the best alternative to addressing any contractual disputes that may arise because arbitration gives the disputants the opportunity to participate in the nomination and appointment of the arbitral tribunal for their dispute with some amount of predictability in international business transactions and a degree of fairness and consistency. It although has brought about neutrality and flexibility which are very important to foreign investors, especially in the oil and gas industry where investments are made even in countries that are unstable (Gray and Kingsbury, 1992).

In the Iraqi draft model technical service contract, dated November 2008, the arbitration is considered following amicable solutions, as stipulated in Article 37. This article provides that

“The Parties shall endeavor to settle amicably any dispute (“the Dispute”) arising out of or in connection with or in relation to this Contract or any provision or agreement related thereto. Where no such settlement is reached within thirty (30) days of the date when one Party notifies the other Party of the Dispute, then the matter may, as appropriate, be referred by the Parties to their senior management for resolution. Where no such settlement is reached within thirty (30) days of such referral to management, any Party to the Dispute may refer the matter, as appropriate, to an independent expert or, by giving sixty (60) days’ notice to the other Party, refer the matter to arbitration as stipulated hereunder. It is understood that no Party shall have the right to claim immunity from legal proceedings or judgement enforcement in this respect. All disputes arising out of or in connection with this Contract, other than those disputes that have been finally settled by reference to either senior management or expert, shall be finally settled under the Rules of Arbitration of the International Chamber of Commerce by one or more arbitrators appointed in accordance with the said rules. The seat of the arbitration shall be Paris, France, unless agreed otherwise by the Parties to the Dispute” (Pedro van Meurs, 2009).

2.2.3. Reasonable assignment and encumbering rights

The long-term benefits of a contract may provide security; however, conditions may change. If one of the parties decides to end the contract, the risks of not adhering to it or terminating it could result in legal action against them. As a safer option, transferring the contract to another person or company is possible.

To ensure a secure transition and understanding of rights and obligations, it is essential to become familiar with the relevant laws related to the contract assignment. Parties to a commercial contract often desire to transfer their rights or obligations to a non-party. However, even though the general rule

permits the unilateral assignment or delegation of contractual rights and obligations, certain contracts like contracts with personal rights, such as an agreement between an author and a publisher or a sportsperson and their agent, cannot be assigned. Thus, one party must obtain consent from all parties to the original contract and the third party agreeing if you want to novate a contract. It is worth noting that the contracts are normally assigned to a subsidiary; a business owned by another business or a successor; and the business that emerges from a sale, merger, or acquisition.

An assignment is a transfer of a right from one party to another. Usually this is the transfer by one party of its rights and remedies, under a contract with a counterparty, to a third party. However, importantly, the assignor remains liable for any obligations it owes under the contract. For example, party A can assign to party C its right to receive goods under a contract with party B, but it will remain liable to pay Party B for those goods (Rebecca Williams and Mark McAllister-Jones, 2020).

For instance, the Iraqi draft model technical service contract, dated November 2008, Article 28 provides that

“Neither Party may assign its rights or obligations under this Contract, in whole or in part, without the prior written consent of the other Party, except that such rights and obligations may be assigned without such consent to the successor of such Party or to a firm or corporation acquiring all or substantially all of the business and assets of such Party. The direct or indirect transfer of shares or other ownership interests in an entity constituting Contractor (except for the transfer of shares in a listed parent company) shall constitute an assignment of rights and obligations under this Contract and shall be subject to this Article 28.1” (Pedro van Meurs, 2009).

It specifies further that

“Neither Contractor nor any entity constituting Contractor shall have the right to assign any of its participating interest, shares, rights, privileges, duties, or obligations under this Contract without the prior written consent of ROC, except to a recognized affiliate, provided that such affiliate shall be qualified with respect to its technical and financial competence. The Contractor or any entity constituting the Contractor shall give ROC one (1) month prior notice of its intention to this effect, provided further that such assignment shall not release the Contractor or any entity constituting the Contractor of its obligations under the Contract and it shall remain jointly responsible together with the assignee affiliate for the proper and timely execution of the Contract” (Pedro van Meurs, 2009).

2.2.4. Reasonable confidentiality

In each business, certain confidentiality provisions are concluded. In the oil and gas business, information is a matter of importance, and the protection of confidential information is a significant component of many transactions in the oil and gas industry due to the nature of the industry. Since the oil and gas contracts contain exclusive technical information and business knowledge, often IOCs put confidentiality clauses in their contracts to make them confidential.

Therefore, it is routine in the petroleum industry to sign confidentiality clauses or confidentiality agreements. Further, in many cases, confidential information needs to be disclosed to certain third parties either for completing the project or due to regulations. The information to be protected by the contract or law of confidence must be a confidential nature and not be in the public domain (Rdhwan Salih and Akram Yamulki, 2017).

Parties in a contractual relationship may have an express term in their agreement, which establishes a relationship of confidence. Almost all countries have made confidential agreements in the oil and gas

industry and contracts will be kept secret by a confidentiality clause. A confidentiality clause will usually be near the end of the contract. It is used to avoid information from coming into the hands of other parties. In addition, it explains which information is confidential for how long and mentions various exceptions to the confidentiality obligation that allow the disclosure of information in certain situations. For instance, in oil and gas contracts, the Iraqi technical service agreement, Article 33, starts by stating “All information and data obtained in connection with or in relation to this Contract shall be kept confidential by the Parties and their Affiliates and shall not be disclosed or communicated to any third party without the other Party’s prior written consent”^{*}.

For the second sample, the Iranian risk service contracts provide “All plans, maps, sections, reports, records, scientific and technical data, and other similar information relating to the operations shall be treated by the contractor as confidential even after the termination of the Contract and shall not be disclosed by the contractor or its affiliates without prior written consent of the NIOC except if required by law to prepare or publish a report. Both parties will fully comply with any license restrictions relating to proprietary technology contained in the license until the license restrictions terminate”.

The format of confidentiality agreement between Shell U.K. Limited, Esso Exploration and Production UK Limited, and the other party[†] states that

“The Receiving Party may disclose the Confidential Information without the prior written consent of the Disclosing Party only to the extent that immediately prior to such disclosure the Confidential Information:

- is already lawfully known to the Receiving Party or its Affiliates under no applicable obligations of confidentiality or restrictions on use;
- is in the public domain other than through the act or omission of the Receiving Party or of any other Person to whom Confidential Information is disclosed pursuant to this Agreement;
- is available to the Receiving Party or its Affiliates having become so available through any third party that expressly represents that it has the right to disclose such information at the time that it is acquired by the Receiving Party or its Affiliates;
- is required to be disclosed by law or by any government, statutory, or regulatory body provided that the Receiving Party informs the receiving third party of the confidential nature of such Confidential Information and makes all reasonable efforts to give prompt written notice to the Disclosing Party prior to such disclosure of the request made by such receiving third party and the extent of the intended disclosure; or
- is required to be disclosed by the Receiving Party or any of its Affiliates to comply with the rules and regulations of any recognized stock exchange upon which the Receiving Party’s or its Affiliates’ stock is quoted or with those of the Securities and Exchange Commission of the United States of America provided that the Receiving Party informs the receiving third party of the confidential nature of such Confidential Information and makes all reasonable efforts to give prompt written notice to the Disclosing Party prior to such disclosure of the request made by such receiving third party and the extent of the intended disclosure”.

In general, all types of upstream oil and gas contracts, concession, PSA, and RSC, contain confidentiality clauses to protect confidential information.

^{*} http://share.pdfonline.com/c5074b62da774a5b86a20b606083d743/oil%20contracts%20v1%20nov%203_Part20.pdf.

[†] <https://www.shell.co.uk/content/dam/royaldutchshell/documents/lubricants/shell-esso-standard-confidentiality-agreement.pdf>.

2.2.5. Governance project structure

The aim of the project is to better enable producing countries to govern the exploitation of their hydrocarbon resources for the greatest national socio-economic benefit. Actors in petroleum governance can be divided into three groups. Government actors can include the executive, ministries, the central bank, a petroleum council, official regulators, and local authorities. People and society may be represented by parliament and civil society groups. The investor/operator grouping includes the national oil company (NOC), local private sector companies, IOCs, and financial institutions. The relative importance of each actor and their interactions with each other vary with the national context and with time. There is, however, general agreement that four key governance functions exist regardless of the arrangement of actors or political context. These are policy, strategy, operational decision-making, and monitoring and regulation (Keith Myers and Glada Lahn, 2006).

Public policy typically comprises a set of objectives, laws, plans, political actions, and standards of behavior that aim to achieve goals in the national interest. As petroleum is a national resource, its exploitation requires policy to ensure maximum benefit to the country and its society. The petroleum sector also operates within a national policy agenda which sets out national goals, priorities, and directions. In addition to policy specific to the petroleum industry, broader public policy may impact the oil and gas sector. This could include, for example, measures to encourage private sector involvement or increase the employment of nationals (Keith Myers and Glada Lahn, 2006).

The strategy function concerns how the oil and gas sector will deliver national policy goals: the pace and means of oil and gas development, the programs to build local capacity, priorities for the use of scarce resources, and responses to uncertainty. The distinction between policy and strategy functions is important but often unclear, and this will be the subject of further investigation in the next phase of the project (Keith Myers and Glada Lahn, 2006).

The operational decision-making involves managing the more short-term, on-the-ground industry operations within the strategic framework. The organizational model for the operation function will reflect the role and degree of the autonomy of the national oil company, the role assigned to international oil companies, and the organization and effectiveness of the regulatory function. There is sometimes confusion as to which decisions are operational and which strategic when responsibilities are unclear.

The monitoring and regulation function provides assurance that policies are being adhered to and that national goals are being achieved. Monitoring and regulation includes financial and technical oversight, the auditing of data, and the holding of agencies to account. It may also include the setting of industry standards and performance measures.

Regardless of the organizational model for governing the petroleum sector, there is a consensus among producers that the clarity of goals, roles, and responsibilities between agencies is crucial. The lack of clarity can lead to conflicting agendas, duplication of effort, and policy paralysis. For each policy, strategy, or operational decision, there has to be clarity on the intended outcome of the decision, who will be involved in making it, and how. Those involved in the decision-making process should know who is responsible for providing input, recommending a course of action, approving the decision, implementing the decision, and monitoring the implementation. There is often confusion between the ministry of petroleum and the NOC over responsibility for policy and strategy making and what the difference is between the two. For instance, if the minister sits on the NOC board of directors, he/she must distinguish between the role of sovereign owner (on behalf of the people) when setting energy policy and the role of company shareholder (seeking profit and value-creation) when engaged in commercial decision-making (Zanoyan, 2005).

The IOC's role in a host country's governance is clearly limited. They seek to achieve an economic result and operate in accordance with their contractual obligations and with national and international law. What IOCs choose to do in the country beyond their contractual and legal obligations falls into the category of corporate social responsibility (Zanoyan, 2005).

It is provided with a minimum level of cohesiveness among the various players, including the oil ministry, the NOC, the state, the finance ministry (in some cases), and the regulatory agency where one exists. When these different government branches are at odds on a policy affecting foreign investment, the IOC cannot even begin to take concrete steps toward building a case to invest in that country. Thus, in addition to the physical resource base, a minimum level of comfort with the host country's institutions, the degree of transparency, and real or perceived commercial and political risks are part of the necessary conditions for making a positive investment decision. In addition, the determination of the modes of decision is the main factor of this concept, and the organization of this decision is conducted under the following headings: operating committee, good governance, audit, information and confidentiality, negotiation and permanent dispute board, followed by the accounting appendices (Zanoyan, 2005).

3. Iranian buy-back and IPC as risk service contracts

3.1. Buy-back

At a London conference in July 1998 which was attended by many IOCs, from Europe, North America, and Asia the representatives of the Iranian government announced terms and conditions for a wide offering of exploration and production (E&P) investment opportunities in that country under so-called "buy-back" terms. Briefly, the IOCs complete an agreed scope of work which may be exploration and/or development. After commissioning, the state-owned corporation NIOC will operate.

The first such contract was in 1995 between NIOC and Total (70%) and Petronas (30%) for production rights to the Sirri offshore field. In the Iranian buy-back agreement, the contractor implements an agreed work program for a full-cycle E&P project or for a development and production project only. In the case of the latter, a net rate of return of 16% to 18% is guaranteed, and the IOC is protected against a collapse in the oil price. If the agreement involves a full cycle E&P project, and the contractor makes a discovery which is judged after appraisal to be commercial, NIOC and the contractor must agree terms and conditions before development can proceed. If the agreement is not achieved, the contractor may withdraw, and his/her costs are reimbursable by NIOC plus an uplift. In the event that no discovery has been made, the IOC is not reimbursed. The contractor is paid a fee for his/her services but may not gain title to any reserves discovered or produced. In the production phase, the IOC is protected against the downside; however, there is neither reward from the upside nor much encouragement for him/her to employ the latest technology.

A buyback may offer the IOC an exploration contract which will not necessarily be converted into a development contract even if commercial discovery is declared. The agreements have a relatively short duration of between five and seven years. Capital cost ceilings can only be exceeded for new additional work approved by NOC. The extra expenditure is then added to the initial capital costs and repaid under the amortization period of the contract. The IOC receives its project expenditure plus a taxable fee. The latter is some percentage of the total capital costs excluding finance charges and operating costs.

3.2. New Iran's Petroleum Contract

3.2.1. Structure and key terms

Generally speaking, IPC is a risk service contract in which the contractor is obliged to carry out the petroleum operations, including exploration, development, and production, and enhance or improve oil recovery (EOR/IOR) on its own costs and risks. Subject to commercial discovery and achieving the contractual purposes in the determined quantities, the contractor is entitled to be reimbursed all costs and receive a remuneration fee in cash or kind through allocated portion of the field production (Jubilee Easo, 2009; Daniel Johnston, 1994) at the sole discretion of NIOC. Section (d) of Article 3 of bylaw* provides that "All risks and costs shall be borne by the Second Party in case no Commercial Field or Reservoir is discovered. The risks regarding the non-achievement of contractual objectives or insufficiency of the Field or Reservoir products for reimbursement/payment of the financial obligations [under the contract] shall be borne by the Second Party".

IPC intends to incentivize investment in projects with a higher level of risk and complexity by stating that remuneration will depend on project specific circumstances, the risk-taking appetite of the contractor, and the deployment of modern technology by the contractor. Further, the NIOC, in the prequalification application form, indicated that only companies with a certain level of experience will be able to bid for riskier and more difficult projects.

It is worth noting that the legal nature of IPC is not different than buy-back contracts because not only both of the above-mentioned contracts are categorized as a service contract, but also they are considered a loan in the form of provision of services.

3.2.2. Cost recovery, remuneration fee, and payment ceiling

The main difference of buy-back and IPC is in the cost recovery process. In buy-back contracts, the contractor is paid with a simple formula as follows:

Capital expenditures + non-capital expenditures + bank charge + fixed remuneration + operation costs before handover

Further, there is an important cap for the internal rate of return (IRR). This IRR is determined in negotiation and usually is between 13% and 18%, so each quarter payable remuneration of the contractor is a function of the agreed IRR. In IPC, the above formula is still in place with a big difference in the calculation of remuneration, so remuneration is not tied to IRR anymore.

Petroleum costs in IPC indicate direct capital costs, indirect costs, operating costs incurred and paid by the contractor, and the accrued cost of money (interest).

Direct capital costs indicate "All capital costs required for development, improved oil/gas recovery or enhanced oil/gas recovery of the reservoir, including all managing, engineering, drilling, and constructing all required surface and subsurface facilities for producing from the field or reservoir such as processing; transmission and injection facilities; utilities; commissioning of all units; exploration expenditures paid in the exploration phase in the case of commerciality of the field; and required repair, restoration, and rehabilitation in brown fields or reservoirs" (Article 2, Section "q", By-law).

* The Iranian Cabinet of Ministers passed the general conditions, structure, and model of the upstream oil and gas contracts (hereinafter referred to by-law), No. H 53367 T/57225 dated August 6, 2016 amended by the by-law No. H 53421 T/ 69978 dated August 31, 2016 and No. H 54407 T/ 34862 dated June 17, 2017.

Indirect capital costs mean “All the costs to be paid to the government, ministries, and public organizations, including municipalities such as taxes, levies, custom duties, and social security charges” (Article 2, Section “r”, By-law).

Operating costs refer to “All the costs paid by the second party in accordance with the contract based on the contract terms and accounting standards in performing production operations” (Article 2, Section “t”, By-law).

Remuneration in IPC is tied to a more complicated formula which is a function of risk of development; it is negotiation-based, called the *R* factor, and is *x* cents per barrel; a per-barrel percentage based on the production volume and oil price shall be agreed. Although IRR is no more relevant and mentioned in the IPC, the above-mentioned range is still a factor of calculation for negotiations about fees per barrel.

Based on Section (e) of Article (3) of Bylaw, the contractor’s fee shall be determined according to the conditions of each project aimed at providing an expected reasonable internal rate of return, compensating the risk, and encouraging the contractor to use optimized methods and advanced technologies in exploration, development, and production.

Given the above, and as one of the main principles governing the IPC, Article 3 of the Bylaw provides that “the repayment of all DCC, IDC, COM, and OPEX and the payment of fees according to the contract shall be subject to the allocation of a portion of the field incremental products or proceeds resulting from the execution of the contract based on the market price of the product (as specified in Paragraph (c), Article 6). The decision to pay the contractor through the delivery of the field or reservoir product or through its proceeds instead of the product itself (up to the full reimbursement/payment of the contractor entitlements) is taken by NIOC”. As stipulated in Article 3, in the event of insufficiency of the allocated portion of production for the reimbursement or payment of approved contractor’s entitlements during the contract term, the unpaid costs and accrued fees shall be reimbursed or paid from the same reservoir and within the ceiling in a longer period to be defined in the contract, as specified in Paragraph (c), Article 6, as the case may be.

Although it has been proclaimed that there is no ceiling for capital expenditures in IPC contrary to buy-backs; however, contractors shall be aware that the ceiling actually exists, and the government cannot pay more than 50% of the per-barrel production value and cannot pay more than each year ceiling of payment which is stipulated in the annual budget of NIOC for the repayment of its liabilities (Akhlaghi and Associates International Law Office).

In both IPC and buy-backs, the contractual obligations are not guaranteed by the government, Central Bank of Iran, and some other state banks.

4. Risk service contracts and IOC’s policies

Generally, in the risk service contracts, the government allows the contractor to recover the costs associated with the development of the hydrocarbon resources. The government pays the contractor a fee which is agreed in advance, and remuneration under a service contract is usually determined using project performance indicators linked to actual production rates and based on pre-agreed capital budgets. All production belongs to the government, and IOCs do not have any title on the produced oil and gas. Therefore, the service contracts are not favorable for IOCs. Some countries are trying to address this perception by introducing performance incentives, such as a fee per barrel produced. This offers the contractor the opportunity to share in reservoir performance (International Monetary Fund, 2010).

For many IOCs, this type of contract formulation is “loss leaders” in the hope that the initial contract will facilitate a constructive relationship with the host country, which will lead to following on long-term contracts based on a PSC. However, very little evidence supporting this belief can be reported.

4.1. Ownership of hydrocarbons

Under the Iranian Constitution, the ownership of natural resources belongs to the “nation” and cannot be transferred (Adrian Creed and Amir Kordvani, 2014). Accordingly, consistent with the requirements of the Iranian Constitution, Article 3(a) of the By-law provides that the right of sovereignty and public ownership over all oil and natural gas reservoirs and fields is exercised by the Ministry of Petroleum for and on behalf of the Islamic Republic of Iran. Furthermore, Section c of the same article stipulates that the repayment of all DCC, IDC, COM, OPEX, and payment of fees according to the contract shall be subject to the allocation of a portion of the field incremental products or proceeds resulting from the execution of the contract based on the market price of the product. The decision to pay the contractor through the delivery of the field or reservoir product or through its proceeds instead of the product itself (up to the full reimbursement/payment of contractor entitlements) is to be taken by NIOC.

Furthermore, according to Article 11(e), any oil, gas, condensate, and any other materials in the reservoirs subject to the contract shall entirely belong to the Islamic Republic of Iran. In addition, exercising the proprietary rights upon the produced oil, gas, condensate, or any other products shall belong to NIOC. All contractor operations shall be carried out in the name and on behalf of NIOC from the effective date of the contract, and all assets, including buildings, goods, equipment, wells, and surface and subsurface facilities, like any other service contract and PSAs (Blinn, K., Duval, C., Leuch, H., and Pertuzio, A., 1986; Kirsten Bindermann, 1999) shall be owned by the NIOC from the same date, as explicitly expressed in Section g of Article 3.

Therefore, the contractor under IPC does not have any ownership right over reservoir and even on the extracted oil or condensate. According to related clauses and appendices of IPC, NIOC has sole discretion regarding lifting of product and recovery of its debt toward the contractor either in kind or in cash. All IOCs unanimously complain that IPC does not allow them to book the reserves (Al-Attar and Alomair, 2005). Therefore, it is a serious barrier in negotiating any agreement that might give a title to oil, either in place or at well-head, to a private party whether it is foreign or domestic (Nasrollahi Shahri, 2010).

On the other hand, the major challenge facing the IOC in respect of the risk service agreement is the method of reward allocation since the IOC always prefers reimbursement in kind (crude oil) and not in cash; nevertheless, many host countries prefer reimbursement in cash. Moreover, this type of agreement is classified as a service agreement, so the IOC does not book reserves which are important issues to IOCs' financial reports. The ownership of oil in situ is also vested by the host country or their NOC. However, it may be repulsive for foreign investment as there is no possibility to book the reserves for financial purpose, and there is restricted ownership on resources because service fee is usually paid in cash not in kind (Cameron et al., 2017). Furthermore, the IOC, has no equity participation in the contract under RSC. Therefore, there is less reward for IOC, who in majority seek for oil in petroleum contract, not cash (Ngopouhe, 2019).

However, many contracts nowadays allow the IOC to book production at the point of export instead of booking reserves if the reward or part of the reward to the IOC is in kind (Al-Attar and Alomair, 2005). For instance, under both the technical service contract (TSC), which is used for the redevelopment of producing fields, and the development and production service contract (DPSC), used for the development of discovered but undeveloped fields, the cost recovery and the remuneration fee are

payable to the contractor in crude oil or in cash, at the contractor's option; these contracts are used in Federal Iraq. Provided that supplementary costs, generally including signature bonuses, costs for remediation of pre-existing environmental conditions and de-mining, and costs for certain facilities as specified in the TSC or DPSC, are payable in cash or in crude oil, at the option of the Iraqi partner to the agreement (Strong, 2019).

In this regard, it is noteworthy that Article 2 of the Exploitation of Natural Resources Law of Qatar provides that "All natural resources are deemed to be State property". However, once extracted from the ground, rights in petroleum can be transferred to oil and gas companies under the net production sharing arrangements set out in the exploration and production sharing agreement (EPSA) and the development and production sharing agreement (DPSA) (Mahmood et al., 2019).

4.2. Governance project structure

Oil companies' primary goal is to make money, but the first and second buy-back generations were not fully responsive to this goal. Commercially, the return of investment in Iran's buy-back contracts has been the lowest among other countries, which is not attractive for foreign investors. The "governance structure of the project" is essential because it shows how the whole project shall be implemented. In the third generation of buy-back contracts and IPC, too many approvals should be acquired, which may delay the project. For each tender, the contractor shall have to go through many stages to get several approvals. Thus, it appears normal that it may last for two years to complete a tender. This extensive supervision and control expand to the extent that, for instance, the tender documents for subcontracting should be approved by NIOC before issuance. The NIOC shall scrutinize variation orders to subcontractors, and regular and continuous upgrades are required on the bidders' shortlist to ensure compliance with the applicable regulations. On that note, IOCs would prefer concessions or PSA only because they have ownership (Chen Alex, 2021). It is a known fact that IOCs cannot have the ownership of the oil field or reservoir in Iran, which creates some problems in implementations since this issue is a very important feature for companies when they are thinking about the benefits and the financial position of investing in a project (Mallinson, 2017).

All those complications of IPC will make some difficulties in the project implementations, which is why IOCs will rather concessions or PSA. In the third generation of buy-back, "deemed approved" is introduced to mitigate this problem. Accordingly, if NIOC does not grant approvals or comments within specific days, it is deemed that the approval is granted. Since it is a service contract, one needs to acquire so many approvals. Therefore, it is expected to have more clarity and transparency in this regard (Chen Alex, 2021).

4.3. Joint management committee

As specified in Section d of Article 8 of Bylaw, in every contract, a joint management committee shall be formed to supervise all the project operations, to make decisions on technical, financial, and legal matters within the framework of the contract, and to decide on the assignment of the subcontracts and annual work program and budget. The Second Party shall be responsible for the implementation of the operations within the framework of approved annual work program and budget. Such committee shall compose of equal members of the first and second contracting parties with equal voting right. The decisions of the committee shall be made unanimously and approved by the authorized authority of the NIOC.

Therefore, in IPC, we face a weak joint management committee (JMC) and a strong host country representative (NIOC). Many issues in IPC require NIOC's approval, but the contractor has a minor remedy for NIOC's delays or non-approval. This may have significant impacts on the project execution.

It should be noted that the coordination procedure will further deal with this issue. In the coordination procedure, IOCs would like to clarify as far as possible a few questions: What is subject to approval? From whom in NIOC we should seek approval?, and What if the approval is unreasonably withheld or delayed? Furthermore, it is essential to clarify what role the NIOC representative shall play in the project execution (Chen Alex, 2021).

A weak JMC (to IOCs) together with unclear NIOC approvals may lead to the abuse of expert procedure and senior managerial consultation in IPC. It is suggested a more robust and more efficient JMC should be used. We believe that the dual levels of approvals (JMC and NIOC) are not necessary. NIOC approval shall only be involved in the contract amendment, and all other issues shall be delegated to the JMC, who is supposed to monitor and supervise the project (Chen Alex, 2021).

4.4. Assignment, confidentiality, governing law, and dispute settlement

In IPC, the assignment of rights and obligations is not allowed without the prior written approval of NIOC. Article 6 of the Bylaw provides that “No contracting partner of the Second Party to the contract is permitted to assign his rights and obligations under the contract in whole or in part to the third parties without the approval of NIOC”. This provision implied that if any right and/or obligation assigned directly or indirectly to any third-party, including contractor’s affiliates, without obtaining NIOC’s approval, any such purported assignment of the contract shall be null and void.

Regarding confidentiality, Article 13 stipulates that

“Prior to providing the information on the oil and gas reservoirs to the companies negotiating with NIOC or to the companies interested in participating in tenders for the implementation of the projects subject of this bylaw (whose preliminary qualification is approved by NIOC), such companies shall sign the confidentiality agreement, whereby they shall warrant and undertake that the managers, employees, experts, and other relevant persons of the signing company and their subsidiaries that should access such information if necessary shall keep them confidential and shall not disclose such information to the third parties without NIOC’s permission (as specified in said document). If it is determined that the said information has been disclosed to third party without authorization, the breaching party shall be liable against NIOC for the damages arising out of the failure to comply with the obligations subject of the confidentiality agreement”.

The contract shall be governed by, interpreted, construed, enforced, and executed solely and in every respect in accordance with the laws, rules, and regulations of Iran, and any claims or disputes arising under the contract or in any way whatsoever relating thereto shall be settled in every respect in accordance with the law, as is stated in Article 1 of the Bylaw.

There is no clear provision regarding dispute resolution in the IPC bylaw. However, all disputes shall first be resolved through amicable solutions such as negotiations, expert determination, and mediation. If the solution is not achieved between the parties within specific period, for instance 45 days, such disputes shall ultimately be referred to arbitration, with applying Iranian laws and regulations. This provision may be a cause for concern given the lack of familiarity many IOCs will have (Dallas et al., 2016). The arbitrators panel and seat of arbitration should be agreed by the parties and approved by the cabinet of ministers as required by Article 139 of the Iranian Constitution (Parris and Skyner, 2017).

5. Comparison of risk service contracts with PSCs and concession

Concessionary regimes enable most of the production to be reported. The “booking” of reserves under PSCs is actually the booking of the oil to which the company will be entitled under cost-recovery and profit-oil sharing terms. It is rare for any production to be reported as company production under risk

service contracts. This partly explains why IOCs typically have a very clear preference for tax and royalty regimes or PSCs. Title to reserves is shifted to the IOC not at the well-head as is usual with the concession agreement but at the nomination, export, and delivery point. For concessions, the reserve booking procedure is very clear since the concession owner owns the mineral rights (Daniel et al., 2010).

Oil and gas projects are by nature long-term, with much of the investment and costs being incurred upfront. A long-term partnership with a contractor may result in better overall field performance and much more value for the state than in the short-term approach. This is a major drawback of service contracts, as they normally last for nine years or less. Under a service contract, the IOCs' interests are likely to be short-term. IOCs are bound to lack incentives to use new or proprietary technology or deploy their best people as the fixed fee and the short duration of the contract offer little upside or reward for superior performance. They tend to maximize output extraction in the first few years of the operation to recoup their investments within a scheduled time, without attention to an optimum recovery schedule over the reservoir's lifespan. Under buy-backs, the contractor has even smaller incentive to reduce the long-term costs and improve efficiency since the field is likely to be under the control of the government at the handover date. Iranian buy-backs illustrate that problem. Iran has been suffering from declining production, the low rate of recovery from existing fields, and little wildcat exploration. However, in IPC where the contractors' involvement in a given project is, say, 15 or 20 years, they may be willing to use new and more expensive technology for longer-term gains (Daniel et al., 2010).

For IOCs, the concession is obviously the most favorable because, in this model, IOCs only pay royalties and taxes to the host government and can conduct operations in whatever they like. All they found belong to them, so they can book this and list the reserves in the balance as an asset. In PSA, the contractor can get work program and budget approval based on discussion with its partner. IOCs do not go back to the government for approval and must share produced oil with the national oil company. Additionally, implementing the project in this type of contract is easy, and IOCs have ownership of produced crude oil. Therefore, they can put it in their asset and report to the shareholders (Chen Alex, 2021).

In the service contracts, IOCs actually provide services to the government and only receive the fee without any ownership. In service contracts like buy-back contracts and IPC, there are many restrictions, and IOCs must follow the owner's instructions to do the work as a mere contractor, not a partner. Thus, in the ranking of preference of all contracts, service contracts are the last choice for IOCs. However, the contract's content, terms, conditions, and particularly the fiscal arrangement within such agreement, are vital for the IOCs (Shareef Salih and Yamulki, 2020). It is often asked which type of regime is the best: PSC, tax/royalty, or service contract. In fact, if a country's fiscal offer is in line with its prospectively and can attract investment, it does not really matter what kind of regime is put in place.

6. Conclusions

Oil and gas projects are by nature long-term, with much of the investment and costs being incurred upfront. A long-term partnership may result in better overall field performance and much more value for the state than the short-term approaches.

As given above, commercially, IOCs are looking for money as much as possible in their business with the host states and/or NOCs. They like to be able to put the barrels of oil into their balance sheet and report them to shareholders. At the same time, they intend to enjoy an efficient fiscal regime to ensure that all costs will be recovered and they will receive a share of profit proportionately with the risks incurred if petroleum is developed and sufficient revenues are generated. If IOCs are favored by the

commercial terms, the legal terms are the final order of business. However, from the legal point of view, IOCs focus heavily on, *inter alia*, contract stability, independent governing law, and neutral dispute resolution.

For IOCs, the PSC and concession's fiscal regimes and governance project structure are more favorable than the service contracts. In concession, IOCs only pay royalties and taxes to the host government and can conduct operations in whatever way they like. All they found belong to them, so they can book this and list the reserves in the balance as an asset. Likewise, in PSC, IOCs can get work program and budget approval based on discussion with their partner. Additionally, implementing the project in this type of contract is easy, and IOCs have ownership of the produced crude oil.

In risk service contracts, IOCs actually provide services to the government and only receive the fee without any ownership. There are also many restrictions, and IOCs must follow the owner's instructions to perform operations as a mere contractor, not a partner. However, IPC as a risk service contract, is covered by some advantages such as longer project lifespan, more flexible fiscal regime, possibility of contract assignment, and neutral arbitration. It should be improved by inclusion of much incentives into the contract to be aligned much with IOC's policies. It is worth noting that permanent sovereignty over resources and the ownership right on petroleum in situ, as the material requirements of the host government, shall in no way be interrupted or slowed down.

Nomenclature

IOC	International Company
IPC	Iran's Petroleum Contract
NIOC	National Iranian Oil Company
NOC	National Oil Company
PSA	Production Sharing Agreement
PSC	Production Sharing Contract

References

- A Brexendorff, Christian Ule and Maximilian Kuhn.(2009).The Iranian Buy-back Approach, Oil, Gas and Energy Law.
- A.A.E. Al-Attar and O. Alomair.(2005).The Relationship Between Upstream Petroleum Agreements and Exploration and Production Costs. 3 (2).
- A.F.M. Maniruzzaman. (2008). The Pursuit of Stability in International Energy Investment Contracts: A Critical Appraisal of the Emerging Trends. Journal of World Energy Law and Business. 1(2), 119–155.
- Abba Kolo and Thomas Walde. (2003). Renegotiation and Contract Adaptation in the International Investment Projects: Applicable Legal Principles and Industry Practices. OGEL1(2).
- Adrian Creed and Amir Kordvani. (2014). Iran's new Integrated Petroleum Contracts, MENA, Legal Update, Clyde & Co., LLP.
- Bayuasi Nammee Luki and Nusrat-Jahan Abubakar. (2016). Dispute Settlement in the Oil and Gas Industry: Why is International Arbitration Important? Ghana Technology University College, P.O Box MC 3262, Takoradi W/R, Ghana, Journal of Energy Technologies and Policy.6(4), 30–38.

- Bernard Taverne. (1996). Product Sharing Agreements in Principle and in Practice in Martyn R David (ed), Upstream Oil and Gas Agreements: With Precedents (Sweet and Maxwell).
- Blinn, K., Duval, C., Leuch, H., and Pertuzio. (1986). A, International Petroleum Exploration and Exploitation Agreements. USA, Barrows Company
- Christopher B Strong. (2019). Oil and gas exploration and production in Iraq, Vinson and Elkins LLP.
- Daniel Johnston. (1994). International Petroleum Fiscal Systems and Production Sharing Contracts (PennWell Publishing Company).
- E Smith, J Dzienkowski, O Anderson, J Lowe, B Kramer, and J Weaver. (2010). International Petroleum Transactions. (3rd ed., Rock Mountain Mineral Law Foundation).
- Eduardo G. Pereira Tuuli Timonen Elina Aleynikova. (2022). Governing Law and Dispute Resolution in the Oil and Gas Industry, Part I: Key Principles and Issues Related to Governing Law and Dispute Resolution in the Oil And Gas Industry edited by Published by Edward Elgar Publishing Limited, the Lypiatts 15 Lansdown Road Cheltenham Glos GL50 2JA UK Edward Elgar Publishing, Inc. William Pratt House 9 Dewey Court Northampton Massachusetts 01060 USA.
- Ernest E Smith.(1992) 'From Concessions to Service Contracts', Tulsa, 27(4), 493–524.
- Gilles LHUILIER. (2015). The Drawing Up of International Extractive Contracts (OIL, GAS, MINING), 2015 Int'l Bus. L.J. 335 (2015).
- Gray, C and Kingsbury, B. (1992). Developments in Dispute Settlement: inter-state arbitration since 1945, reprinted from the British year Book of International Law., 63 (1), 97–134.
- International Monetary Fund Petroleum fiscal regimes, retrieved from <https://www.elibrary.imf.org/display/book/9780415781381/ch004.xml>.
- International Monetary Fund. (2010). Edited by Philip Daniel, Michael Keen and Charles McPherson, The Taxation of Petroleum and Minerals Principles, problems and practice, first published 2010 by Routledge 2 Park Square, Milton Park, Abingdon, Oxon OX14 4RN Simultaneously published in the USA and Canada by Routledge 270 Madison Avenue, New York, NY 10016, This edition published in the Taylor and Francis e-Library, © 2010.
- International Monetary Fund. (2010). Petroleum fiscal regimes, Routledge.
- James Dallas and partners. (2016). New Model Iranian Petroleum Contract, Oil and Gas, lexology, www.dentons.com/en/insights.
- Jubilee Easo. (2009). A Practical handbook, Oil and Gas, Production Sharing Agreements and Service Contracts, Consulting editor Jeoffrey Picton Turbervill, Ashurst LLP.
- Keith Myers and Glada Lahn Edited by Valerie Marcel, John Mitchell and Willy Olsen, Chatham House and the Centre for Energy. (2006). Petroleum and Mineral Law Policy (CEPMLP), GOOD GOVERNANCE OF THE NATIONAL PETROLEUM SECTOR – INTERIM REPORT., Sponsored by some giant IOCs named at Shell, BP, Statoil, ExxonMobil Corporation, Petrobras and also by International Petroleum Industry Environmental Conservation Association (IPIECA).
- Kirsten Bindermann. (1999). Production-Sharing Agreements: An Economic Analysis, Oxford Institute for Energy Studies, WPM 25, Volume 25 of WPM (Oxford Institute for Energy Studies)., 93 pages.

- Lawrence W. Newman and Richard D. Hill. (2014). *International Arbitration in Oil, Gas and Energy, The Leading Arbitrator's Guide to International Arbitration in Lawrence W Newman (ed.)*. ISBN: 978-1-937518-33-2., 1,200 pages.
- M Bunter. (2009). *The Iranian Buy Back Agreement, Oil, Gas and Energy Law*.
- Mark Hammerson. (2011). *Upstream Oil and Gas: Cases, Material and Commentary (1st edn, Globe Law and Business)*., 589 pages, ISBN: 9781905783472.
- Michael Polkinghorne and Courtney Kirkman. (2011). *Choice of Law in Oil and Gas Agreements: It Does Make a Difference*. 9(1) OGEL.
- Mohsim.SH.Salih and Rdhwan.SH.Salih (2017). *Legal Protection for Confidential Information in International Oil and Gas Contracts*, *Journal of college of Law for Legal and Political Sciences*., 6(21)., 382–419.
- Nima Nasrollahi Shahri. (2010). *The Petroleum Legal Framework of Iran: History, Trends and the Way Forward*, *China and Eurasia Forum Quarterly*, 8(1)., p111., Academic Journal.
- P D Cameron and Michael C. Stanley. (2017). *Oil, Gas, and Mining: A Sourcebook for Understanding the Extractive Industries*. (World Bank Group, Washington)., <https://doi.org/10.1596/978-0-8213-9658-2>, 332 pages.
- Paul Michael Blyschak. (2010). *Arbitrating Overseas Oil and Gas Disputes: Breaches of Contract Versus Breaches of Treaty*. *Journal of International Arbitration*., 27 (6). 579 – 629.
- Pedro van Meurs. (2009). *Commentary on the Iraq Draft Technical Service Contract*., OGEL.
- Peter D Cameron. (2013). *International Energy Investment Law: The Pursuit of Stability*. (OUP) 1.
- Peter Roberts. (First Edition, 2016), *Oil and Gas Contracts: Principles and Practice*.
- Philip Daniel, Michael Keen and Charles McPherson. (2010). *The Taxation of Petroleum and Minerals Principles, problems and practice*. Edited by, © 2010 International Monetary Fund, ISBN 0-203-85108-0 Master e-book ISBN.
- Piero Bernardini. (2008). *Stabilization and adaptation in oil and gas investments*, *Journal of World Energy Law and Business*, 1(1)., Oxford University Press.
- Ratko Brnabic. (2016). *Production Sharing Contracts in the Oil and Gas Industry*. Faculty of Law in Split, Croatia rbrnabic @pravst. Hr.
- Rdhwan Shareef Salih and Professor Dr. Akram Yamulki. (2020). *Petroleum Exploration and Production Contracts as Regulatory Tools: The Kurdistan Region Production Sharing Contracts*. *Journal of Law, Policy and Globalization*., Vol 101.
- Rebecca Williams and Mark Mcallister-Jones. (2020). *Assignment and Novation: Spot the Difference*. Watson Farley and Williams.
- Richard Mallinson. (2017). *the IPC terms demonstrate a Big Improvement on Iran's Old Oil Contract Model*, An interview made by Kourosh Ziabari.
- Richard Parris and Louis Skyner. (2017). *Key comparisons of the new Iran Petroleum Contract and Buy-back*, Cliffordchance.
- Roland Brown. (1976). *Choice of Law Provisions in Concession and Related Contracts*, *The Modern Law Review*. Published by Wiley., 39(6)., pp. 625–643.

- Salman Mahmood and Michael Earley, Sultan Al-Abdulla and Partners. (2019). Oil and gas regulation in Qatar: overview. © 2023 Thomson Reuters, Resource Type Country Q&A, Jurisdiction.
- Simon Vorburger and Angelina M Petti. (2018). 'Chapter 11: Arbitrating Energy Disputes', in Manuel Arroyo (ed), Arbitration in Switzerland: The Practitioner's Guide. (2nd edn, Kluwer Law International).
- Stephanie Ngopouhe. (2019). the most appropriate upstream contract for developing countries. University of Dundee, p 1–20.
- Vahan Zanooyan. (2005). Institutional Cooperation in Oil and gas: Governments, Companies and the Investment Climate, 35 (1), 27 p, OGEL.
- Willem JH Van Groenendaal and Mohammad Mazraati. (2006). A Critical Review of Iran's Buy-back Contracts., 34(18), 3709–3718
- Zhuo Feng, Shui-Bo Zhang and Ying Gao On. (2014). On Oil Investment and Production: A Comparison of Production Sharing Contracts and Buy-back Contracts. Volume 42 Energy Economics, 395–402

**COPYRIGHTS**

©2024 by the authors. Published by Petroleum University of Technology. This article is an open-access article distributed under the terms and conditions of the Creative Commons Attribution 4.0 International (CC BY 4.0) (<https://creativecommons.org/licenses/by/4.0/>)

