Types of contracts used in the upstream oil industry and related issues.

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I hereby declare that the work submitted is mine and that where I have made use of another’s work, I have attributed the source(s) according to the Regulations set in the Student’s Handbook.

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Abstract

This dissertation was written as part of the MSc in Energy Law, Business, Regulation and Policy at the International Hellenic University.

Due to the recent discoveries of hydrocarbon reserves in the Eastern Mediterranean I often have thought what oil companies actually do to explore and produce hydrocarbons and I wanted to figure out how these operations are regulated. Therefore, the focus of the dissertation is on the various standard types of contracts used in the upstream oil industry and its primary aim is to introduce this energy sector and become a practical guide to anyone who is interested presenting in a comprehensible manner the legal and operational aspects of the upstream activities. My concern was to include the more essential information I could in order to provide a solid understanding of the mechanisms used to safeguard the relationships between the state which opens its upstream oil industry and the International Oil Company.

I would like to express my deepest gratitude to my supervisor Prof. Theodore Panagos for sharing his energy expertise. His valuable suggestions, assistance and contributions were very helpful during the development of this dissertation.

Also, I wish to express my gratitude and love to my father, my wife and my daughter for their valuable and constant support.

Keywords: Oil contracts, upstream industry, licensing procedure, lex petrolea, environment.

Mavridis Efstatthios

16 February 2018
Preface

Oil will continue to be an essential element of states’ energy mix and a key driver of the world economy for the foreseeable future. Explorations of new fields and production of oil are considered activities of vital importance for the energy sector. The dissertation stresses the legal context and contractual regime under which the upstream activities operate.

Therefore, the dissertation starts with basic issues which underpin the said activities and carries on with issues that contribute to a practical consideration of the sector. It includes sections covering the procedures of awarding the rights for exploration and production of oil, the types of contracts and the most common terms used in the upstream industry, the use of stabilisation clauses in the contracts, consideration of the notion of lex petrolea, the EC Hydrocarbon Directive and its provisions in relation to awarding exploration and production rights, the licensing regime of three selected countries (Greece, United Kingdom and France) and the way health, safety and environmental issues are being dealt.
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Introduction

The phrase “Petroleum is as necessary to the economy, as blood to the human body\textsuperscript{1}” demonstrates that oil is a strategic commodity which dominates the economy and involves tremendous wealth and power. Oil is likely to continue to be a key driver of the world economy for the foreseeable future, due to the long-term growth in economies, especially in China and India, and the increasing demand for oil in the transport sector, power generation and other industrial uses\textsuperscript{2}. Undoubtedly, it is important for the oil industry to search for new reservoirs in countries with petroleum resources, using the technological advances and innovations which allow exploring and producing hydrocarbons in areas that it was impracticable until now.

The upstream sector of hydrocarbon business activities comprises exploration and production (E&P) cycle of oil industry. The initial phase is to carry out seismic exploration and exploratory drillings in order to discover accumulations of oil situated thousands of meters under the earth-ground. Production is the process of recovering those hidden resources for processing, marketing and use, if the techno-economic conditions permit. It is conceded that a new discovery is not put into production unless it is appraised to be \textit{commercially viable}, in sufficient quantities and qualities and with an economically viable extraction cost.

Upstream oil activities are considered as the most capital intensive as they require vast financial resources and infrastructure, entailing such a contrast between risk and reward, bearing in mind the commercial, physical and political risks that must be faced at every stage of such a usually international investment.

\textsuperscript{1} As stated by George Clemenceau (French Prime minister during the WW 1). In Rouzaut-Bret N./Favennec P., \textit{Oil and Gas Exploration and Production}, 3\textsuperscript{rd} edition, (2011), Editions Technip, Paris, p. 5.
Hydrocarbon resources, State Sovereignty and Oil Industry

Ownership of oil resources

It is critical, in terms of due diligence, for an oil company to check at the outset the status of the territory within the contract area lies and whether there is a dispute between the host state and a neighbouring state with a competing claim over all or part of the territory.

Under article 2 of the “Charter of Economic Rights and Duties of States” as formed by the 1974 UN GA Res. 3201 containing a “Declaration on the Establishment of a New International Economic Order” every state has and shall freely exercise full permanent sovereignty including possession, use and disposal over all its wealth, natural resources and economic activities and hence is responsible for maintaining a national legal regime for regulating petroleum operations. Also the UN Convention on the Law of the Sea 1982 (UNCLOS) confers on coastal states sovereign rights for “the purpose of exploring and exploiting, conserving and managing the natural resources”.

Therefore, all hydrocarbon resources in the soil and subsoil in internal waters and in the territorial sea, on the continental shelf and in the exclusive economic zone (EEZ) come under the jurisdiction of the state. States are free to recognize private ownership of these resources or they can treat them as state-owned. In the vast majority of countries, the owner of petroleum and the mineral resources in general is the state. The U.S.A. and Canada are the only countries still recognizing private ownership of petroleum.

The Participants in the Oil Industry

Given that states with significant hydrocarbon resources usually are unable to bear the risks of exploration and production of the oil resources located in their territory and lack the technical expertise, their governments usually decide to delegate the exploration and production of oil to foreign oil companies that are known to have

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4 Articles 56 and 77, the Convention, in Picton, op. cit., p. 7.
the expertise, sophisticated technology and access to financial resources to undertake upstream oil operations.

Therefore, a commercial relationship is established between an International Oil Company (IOC) or a consortium of companies and the state (HS) or a National Oil Company (NOC) which is controlled by the state. That relationship may constitute pole of convergence, divergence and tensions of public and private interest especially if we take into consideration that the state can always use its legitimate or administrative power to change the rules of the game. The tensions are mostly identified in the allocation of risk between the parties over the field’s producing life and particularly how profits are divided and how costs are to be treated in order to accomplish the state’s objectives regarding the development of the resources. In any case it is the IOC that takes the greatest risk especially in respect of exploration.

The states’ primary goal is to explore the country’s petroleum basins, to develop and exploit the resources discovered, to put into production discoveries being undeveloped for technical or financial reasons. Further, in order to maximize its revenues while securing, if possible, returns to investors commensurate with the risks run during the exploration, the state should establish a sound, attractive, fair and stable fiscal and contractual regime, to supervise and monitor operations in consultation with the companies and to acquire expertise through the transfer of technology and skills.

For oil companies the objectives are to recover the investments costs as soon as possible, to obtain a return consistent with company’s objectives, to gain access to oil reserves and to limit risk by diversifying their portfolio exploration and production acreage.

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6 When a country opens the oil resources to development or participation to development by foreign companies is referred to as the host country (HC) or host state (HS).

7 Rouzaut, op. cit., p. 177.
International Petroleum Practice

The petroleum law may be specifically designed to deal with matters regarding exploration for oil and in case of commercially discovery, its production until decommissioning phase and site restoration operations at the end of exploitation\(^8\) determining how to authorize IOC to carry out the said operations (as illustrated in Picture 1). Though, may also be a general mining law with special section reserved for petroleum issues. In the absence of a petroleum law the constitution itself may directly authorize the government to regulate petroleum issues.

![Upstream Oil & Gas Life Cycle](https://www.slideshare.net/PuputAryanto/introduction-to-oil-and-gas-industry-upstream-midstream-downstream, Risanto P., Introduction to Oil and Gas Industry, Upstream, Midstream, Downstream)\(^8\)

Authorisations of the aforementioned operations are awarded in the form of two types of petroleum regulatory systems either by the licensing concession system (LCS or licenses) or by the contractual system\textsuperscript{9}.

**Licensing Concession System**

A petroleum license is an administrative authorization issued by the government and may be granted to an IOC under entirely defined terms in the national legislation for a specific type of oil operation either for exploration over a defined area (exploration license) including drilling, or for production (lease or concession) over a restricted development area authorizing the development and production for a specific period on an exclusive basis. Often non-exclusive licenses are conferred for geological and geophysical prospecting\textsuperscript{10}.

Even if such licenses are not governed by a distinct concession contract they are categorized from a legal point as pure concession agreements. In this case the signing of a contract is not necessary because all terms are fixed by the country’s laws and regulations and are non-negotiable (e.g. the environmental requirements). However, the state retains the right to modify at any time those fixed terms and conditions that are not negotiated and this is especially significant when applicable to the rate of taxation imposed by the state on the income from oil activities, causing investment insecurity and uncertainty in relation to the project feasibility.

The licensing system is a royalty/tax system, primarily used by developed nations, under which the government will transfer title of the oil to a company if it is produced and a company then pays royalties and taxes.

**E&P Contractual System**

In cases where a country’s legislation and the fiscal regime are not fully defined by national law, then the award of E&P rights may result from the signing of a detailed E&P contract which defines any provisions not covered by the legislation regarding the exploration and production activity and the elements of the fiscal regime. Each E&P contract is associated with a fiscal regime consisting of economic and tax provisions.


defined by the country’s petroleum law applicable to the contract-holder and its main purpose is to determine how the profits are shared between the host country and the IOC (as summarized in Table 1, for the three main E&P petroleum agreements).

<table>
<thead>
<tr>
<th>Basic elements</th>
<th>Concession</th>
<th>Production sharing contract (PSC)</th>
<th>Service agreement (SA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>In its most basic form, a concessionary system has three components: royalty, deductions (such as operating costs, depreciation, depletion and amortization, and intangible drilling costs), and taxes.</td>
<td>Under a PSC, the contractor receives a share of production for services performed. In its most basic form, a PSC has two components: cost recovery and the division of profit oil. However, many PSCs have four components: royalty, cost recovery, profit oil, and taxes.</td>
<td>Under a SA, the contractor receives a fixed or variable fee for the services performed. Corporate income taxes may apply.</td>
<td></td>
</tr>
<tr>
<td>The royalty is normally a percentage of the proceeds of the sale of the hydrocarbon. It can be determined on a sliding scale, the terms of which may be negotiable or biddable or statutory, and paid in cash or in kind. The royalty is tax deductible.</td>
<td>Similar to concessionary systems. In addition, royalties are not normally cost recoverable but tax deductible.</td>
<td>Not applicable.</td>
<td></td>
</tr>
<tr>
<td>The definition of fiscal costs is described in the legislation of the country or in the particular concessionary agreement. Royalties and operating expenditures are normally expensed in the year in which they occur, and depreciation is calculated according to applicable legislation. Some countries allow the deduction of investment credits, interest on financing, and bonuses.</td>
<td>Fiscal costs are defined and rules for amortization and depreciation are established in the legislation of the country or in the particular PSC. After payment of royalties, the contractor is allowed to recover costs in accordance with contractual provisions (a cost recovery limit may apply). The remainder of the production is split between the host government and the oil company at a stipulated (often negotiated) rate.</td>
<td>Fiscal costs are defined and rules for amortization and depreciation are established in the agreement.</td>
<td></td>
</tr>
<tr>
<td>There are no cost recovery limits.</td>
<td>Usually, costs can be recovered up to a limit as defined in the PSC.</td>
<td>Cost recovery limits are sometimes imposed on the contractor.</td>
<td></td>
</tr>
<tr>
<td>The taxable income under a concessionary agreement may be taxed at the country’s basic corporate tax rate. Special investment incentive programs and special resource taxes may also apply. Tax losses may be carried forward until full recovery or for a limited period of time.</td>
<td>Corporate taxes may apply or may be paid by the host government or its national oil company on behalf of the contractor. Income tax is calculated on taxable income (revenue net of royalties, allowable costs, and government share of profit oil). Tax losses may be carried forward until full recovery or for a limited period of time.</td>
<td>Corporate taxes may apply or may be paid by the host government or national oil company on behalf of the contractor. Income tax is calculated on the difference between the service fees and the allowable costs. Tax losses may be carried forward until full recovery or for a limited period of time.</td>
<td></td>
</tr>
</tbody>
</table>


As petroleum industry has become globalized some countries use model contracts that have both standarised terms and clauses open for negotiation\(^{11}\). Model contracts have been developed by national and international petroleum industry to improve efficiency, are evidence of international best practices applied globally and have contributed to a global standardization of upstream petroleum contracts\(^{12}\).

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\(^{11}\) Duval, op. cit., p. 131.

Contractual system may be categorized into production sharing contracts, risk-bearing service contracts, and non-risk bearing service contracts.

Process of Awarding Rights for Oil Exploration and Production

Generally, countries allocate petroleum E&P rights in various methods and may take the forms of: i) direct negotiations (open door systems) where the criteria for award are often not pre-defined and known to market participants, ii) of public tenders (the licensing rounds) through administrative procedures on the basis of criteria defined by the government and competitive bidding through auctions or iii) some countries they use a combination of the above methods. The auction procedure may include either cash bidding in which rights go to the highest bidder or work programme bidding with all financial provisions fixed by legislation where the license is awarded to the applicant that bids to spend the highest amount of work on exploration for petroleum in the license area\textsuperscript{13}.

The award of E&P licenses or contracts more often results today from competitive biddings organized by the host country pursuant to a transparent tender procedure, in order to broaden the number of competent applicants for an area and to ensure that E&P rights are awarded to the most efficient operators, where companies compete against to each other by offering the best terms\textsuperscript{14}.


\textsuperscript{14} The most favorable sealed-bid offer in bid letting process.
Types of Upstream (E&P) Oil Agreements

There are four basic E&P types of contracts available in order to regulate the relations between the host government and the IOC and are the following: i) the Concession (license or lease), ii) the Production Sharing Agreements (PSA), iii) the Service Agreements (SA) and iv) the Participation Agreements (or Join Venture Agreements). In recent years a fifth type of agreement is also commonly used and is considered as hybrid agreement since it contains elements of more than one of the basic categories and fits to state’s unique political, financial, economic and resource needs\textsuperscript{15}.

In any case countries have the discretion to select the most appropriate type of upstream petroleum contract they consider, depending on the experience, the capabilities and the bargaining strengths of the host state equivalent to the petroleum potential of the offered acreage and the international oil market condition.

Generally speaking upstream oil contracts are quite long-term agreements concerning a specific contractual area awarded to the investor on an exclusive basis by the host government. Although, each of these regimes may be used to accomplish the same purpose they are conceptually different from each other because each one of them grants different levels of control to the IOC, provides different levels of NOC involvement and state participation and different remuneration scheme\textsuperscript{16}.


Modern host government contracts in general consist of a document with several sections taking the form of articles and sub-articles containing administrative, operating, technical, legal, financial, taxation, commercial and other provisions which apply to the different phases of the contract (exploration and exploitation) and irrespective of their category contain in a great degree similar provisions and structures addressing the following issues:

- The participants of the contract (it is already discussed above).

\footnotesize{\textsuperscript{15} Smith E. et.al, International Petroleum Transactions, 3\textsuperscript{rd} edition, Rocky Mountain Mineral Law Foundation, Colorado, (2010), USA, p. 429.}\n
\footnotesize{\textsuperscript{16}Ibid, p. 429.}
• The scope of the agreement in which there is a description of the exclusive rights to carry on petroleum operations in the area, which are granted by the state to the oil company.

• The contracting area for exploration and development (usually described in Annexes) and relinquishment\textsuperscript{17} schedule. The size and definition of the contracting area for the exploration and potential development activity which a host state makes available is specified showing the boundaries and indicating the coordinates of reference points and is of crucial importance since the contractual rights granted to the IOC are limited to that contract area. The contract holder cannot hold on to the entire area indefinitely. Part or parts of the original area must be relinquished in such a shape and size suitable to be offered once more for licensing.

• The ownership of oil produced. A transfer of ownership of petroleum takes place from the owner of petroleum in situ (which is the state) to the holder of an exclusive production license at the moment the petroleum comes to the licensee’s well.

• Duration and sub-periods. Usually there is an initial period and then further extensions. The initial exploration period begins when the contract takes effect and shall not extend beyond 10 years. Next, after a development plan with respect to any commercial discovery has been adopted the production period begins, the duration of which varies depending on the agreement but usually is authorized for a total period of 30 or 40 years, if production is economically viable.

• Annual work programmes and budgets. The contract specifies whether the contract holder must comply with both work and expenditure programme for each year by type of activity. The contract holder must submit to government a work programme together with a budget for the coming year and any data obtained during operations.

\textsuperscript{17} Under which there is an express obligation for the IOC to enter into work programme and forces the IOC either to discover commercially marketable reserves and develop them according to the work plan approved by the oil ministry (or NOC) or to release the area back to the government.
• The obligations and rights of the contract holder. Indicatively, the contract holder will be obliged to execute all his operations according to the provisions of the contract, diligently and in accordance with Good Oilfield Practices regarding drilling, use, operation and decommissioning of oil installations. The company will be obliged to operate in a safe manner without harming the health of the employees or causing damages to the environment. The contract holder will be responsible for any damage from his conduct and will be obliged to compensate the government or any third parties for such damage. The rights of the contract holder such as exclusivity for the operations, tax incentives and other customs privileges or administrative facilities are also described in the contract.

• State participation. In some contracts there are provisions permitting the state to participate (usually through an NOC) directly to the petroleum operations as a partner of the contract holder with a defined share on the basis of cooperation agreement.

• Unitisation clause (is analyzed below as a type of contractual agreement). That clause ensures that the recoverable reserves are exploited in a coherent manner (e.g. by appointing a single operator, adopting a joint development). An unitisation programme must be submitted in the applicable timeframe to the government for approval.

• Access to oil for the domestic or export market. The contract holder is responsible for the marketing of the oil products extracted and is obliged to obtain the best possible price and usually there is a requirement that the domestic market should have a first call on national production\(^\text{18}\).

• The generations of revenue through royalties. Royalties is the most basic petroleum tax, expressed as a percentage of the oil volumes produced by the contract holder and is payable in cash or in kind.

• Area rentals, fees, bonuses and other taxes that the contract holder may be obliged to pay.

\(^{18}\) Rouzaut, op. cit., p. 190.
• Social benefits. The Contract holder may be required to give priority to the training and employment of local personnel as well as priority to local products and services and in general in local development.

• Environmental protection clause under which the contract holder should conduct all petroleum operations in a manner which will assure the protection of the environment and in full compliance with the environmental laws, the approved strategic environmental assessment (SEA), the Terms of Environment (ToE) resulting from the relevant Environmental Impact Assessment (EIA) and any additional Environmental Action Plan (EAP).

• Force majeure. It means any event (act of God, acts of war, civil unrest) beyond the reasonable control of the party claiming to be affected, that allows the performance of any obligations to be suspended to the extent to which the relevant party is affected.

• Modification of the agreement, stabilization clauses (they are discussed below), adaptation clauses in order to allow the HC and IOC to mutually renegotiate the agreement. It is defined how the agreement can be modified. The new conditions only apply to contracts which are granted after the effective date of the new regulations except for rules, permits and conditions regarding environmental matters since the latter will be made applicable subject to the proper transitional provisions to already existing or new contracts alike19.

• Settlement of disputes. Initially there is a provision for amicable resolution of any dispute between the contract holder and the state. In the event of failure of the parties to reach an amicable settlement then the dispute shall be referred to the Sole Expert. Any serious dispute between the state and the investor that has not been resolved will be settled finally by arbitration using procedures established by international organisations. Any disputes of an operational or technical nature may be referred to technical experts.

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Applicable law is usually the law of the host state.

**Concessions**

Concessions are the oldest form of petroleum contracts, under which IOC were granted absolute proprietary and ownership rights over vast acreage of land (and of any hydrocarbons produced within the relevant area) for a relatively long period such as 60-90 years, providing to the IOC’s extensive control over the schedule and manner in which oil reserves were developed, in return for the payment of royalties and income taxes calculated upon the quantity of oil production. Because the concessionaire assumed all of the risks under the concession arrangement the rewards were usually weighted in its favour. That original concession regime was inequitable and criticized by many developing countries so has gradually evolved to the newer form of concession updated to better safeguard sovereign rights and the legitimate interests of the host country.

With the modern concessions (licenses or leases) a government grants by a suitable tendering process an IOC or a consortium of companies, a license with the exclusive right for a specific type of petroleum operation, usually to explore for and produce oil within a specific area (the license area or block), for a specific period (maximum 30 or 40 years). New concessions allow some control by the host state, through a NOC, over the management and exploration of the resources.

As it is already mentioned above, the main financial gain by the host state arise from the payment of royalties (in line with the royalties’ market value), income taxes (if the venture is profitable) and other related payments (production bonus, surface fee) made by the IOC, if oil is produced. The royalty is usually set as a sliding scale, based on level of production. In some countries, the taxation is established by the general revenue laws applied to corporate entity profits while in other countries an IOC may pay for oil ventures a corporate income tax and a special petroleum tax. The IOC may also be required to pay a signature bonus (or license fee) to the government in order to secure the license. Some governments pursue to acquire indirect benefits

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20 As long as the license is valid and subject to certain conditions, the licensee is authorized to exercise the rights conferred in the license against third parties.
21 High levels of royalties may discourage investors and prevent further investments.
22 Makuch, op. cit., pp. 210-211.
by supporting local content in several ways such as, imposing the concessionaire to provide training and employment for workers from the host country or that certain technology developed by the licensee be transferred to the host country.\(^{23}\)

All petroleum resources are owned by the host country in situ (before they are extracted from the subsoil), but ownership of any extracted petroleum transfers to the IOC at the wellhead. Ownership of equipment and installation permanently affixed to the ground generally passes to the host state at the expiry of the concession or sometimes until the expended costs have been recovered and the IOC is typically responsible for abandonment and site restoration. This transfer of title of asset facilities does not apply to leased equipment. Concessions can be considered as a relatively free market regime, under which the IOC bears all of the risks in the venture and enjoys share of the benefits and is allowed to pursue its interest with relative freedom, subject to the timing, environmental and other constraints imposed by the terms and conditions of the license.\(^{24}\)

**Production Sharing Agreements (PSA)**

The concept of production sharing first introduced in Indonesia in 1966 when it was decided to abandon the traditional concession in favor of the PSC and since then PSA have become widespread and they are the most common type of contractual systems in many developing countries.\(^{25}\) A PSA is a contractual relationship between the host state (represented by NOC, which will take delivery of the state’s share of production) and an IOC, as a contractor or service provider, authorizing the latter to undertake petroleum exploration and production with the particular terms of the agreement within a specified area for a defined period in exchange for the entitlement to a defined share of the produced oil. The contractor bears the entire exploration risk of the project and is usually in charge of the operation and management of contract area, except where the contract provides the host state with the option to participate

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\(^{23}\) E.g. under the Turkish Petroleum Code, Article 120, Law No. 6326 (1954), providing that “Petroleum rights owners shall financially sponsor special education and training abroad or in Turkey of Turkish citizens, not to be less than 25% of foreign persons they employ”. (Smith, op. cit., pp. 448-451).

\(^{24}\) Picton, op. cit., p. 29.

\(^{25}\) E.g. in Malaysia, Egypt, India, Nigeria, Central Asian Republics of the Former Soviet Union, China and many other countries.
directly in the venture. The state always remains the owner of the natural resources and only transfers title to the IOC’s share of the oil once it has been produced. A royalty may be payable to host country on all oil produced.

The initial proportion of oil production is known as cost oil which is sold on the open market or back to the NOC and is provided to remunerate the IOC and recoup its costs and capital and operational expenditures. It may be a limit on what proportion of oil production in any year can count as cost oil. The remaining oil, once costs and royalties have been recovered is known as profit oil and is allocated between the state and the investor in agreed proportions, typically at a rate of about 80% for the government and 20% for the company.27

The IOC generally pays income tax to the HC on its share of profit oil, as well as other taxes. It should be mentioned that profitability of a field will also be dependent upon the current market price for oil.28 The PSA once it is negotiated and signed, often becomes part of national legislation, providing in that way legal security to the IOC. Contractors are required to submit a production programme and a budget in order to be approved by the NOC. Under the PSA the NOC retains the ownership of all equipment and installations, with the possible exception of leased equipment, used for operations once the terms of the PSA have finally expired or at payout.29

Although there is no a standard PSA model for all countries due to several factors unique to each country, however many states have model contracts which are frequently used as basis for bidding and the start of negotiations between the IOC and the HG.30

Service Agreements (SA)

Under an SA the state hires an IOC, for a fee, to provide technical and financial services relating to the exploration and production of oil, within a specified area and for a specific time period. The state retains full ownership of petroleum being

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27 Makuch, op. cit., p. 211.
29 Smith, op. cit., p. 464.
30 Hunter, op. cit., p. 39.
produced on its soil in situ or produced. SA have been adopted mainly in Latin America and in some countries of Middle East, such as Iran, Kuwait and Saudi Arabia with strong elements of energy nationalism and due to constitutional provisions that actually prohibit foreign control or ownership of their natural resources. SA can be divided into two types: Risk service contracts (RSC) and pure service contracts (PSC\textsuperscript{31}).

Under risk service contract the contractor provides all capital and management, under the control of NOC, bearing all the exploration risk. If commercial oil reserves are found, the IOC contractor is reimbursed, in cash (convertible currency, usually USD), rather than share of the produced oil, with a service fee (with interest) in order to recover its investment and operating costs and to provide for a profit element for its services. Some RSC (such as in Brazil) in the case where access to petroleum is important for the service contractor, give the IOC the right to purchase portion of the oil produced from the host state at a discounted price (market value price\textsuperscript{32}).

Pure service contract is a simple contract of services where the contractor carries out certain services (e.g. engineering, consulting, constructions, managerial and other development or exploration services) of existing oilfields, without bearing any exploration risk, since risks and rewards are retained by the state. The contractor is compensated with a flat fee for its services and has no right to the produced oil. This type of contracts includes management contracts (e.g. start-up assistance) and turnkey drilling contracts entered into between an oil company and a service company engaged in the business of drilling wells for hire\textsuperscript{33}.

**Participation Agreements (PA)**

The participation agreements involve the creation of an association of two or more entities, private or public, or a combination of private IOC and public (through an NOC) as part of the consortium, in order to share risks and rewards for large scale or high-risk venture. Under joint venture the state acquires participatory interests in exploration and production process taking place within its territory. Thus, the form of joint venture (JV) may be considered not as a separate form of contract, but as an

\textsuperscript{31} Smith, op. cit., p. 482.

\textsuperscript{32} This buy back clause is also a kind of security to the contractor for receiving its remuneration in case the host state faces problems with timely paying the service fee. (Duval et al., op. cit., 134.).

\textsuperscript{33} Smith, op. cit., p. 482.
agreement which is adjunct to a concession, PSA, or even a risk-service agreement\textsuperscript{34}. Usually the participation rights are negotiated between the host state and the IOC, although the proportion of state participation may be fixed by legislation. Some other main features of these agreements include that each partner contributes to the costs and shares, the benefits or losses according to its proportionate equity in the partnership. In an operating agreement the legal relationship between the partners, the rules and procedures for the joint development are established\textsuperscript{35}.

\textbf{Joint Operation Agreements (JOA)}

The JOA in petroleum industry is an underlying contractual framework of a joint venture and particularly is a contract where two or more parties agree to undertake a common task to explore and exploit an area for hydrocarbons, usually in international level\textsuperscript{36}. The parties to the agreement can be classified as operators and non-operators according to the volume of interests. The party with the largest interest in the agreement is usually the operator of the agreement and is responsible for the day-to-day management and operation of the field. The operator is appointed by the participants of the JOA and must also be approved by the state agency or NOC overseeing the operations. Each JOA should establish the basis for sharing rights and liabilities among the parties, though in most cases these are shared in proportion to the interests of the participants.

Further, it is critical to provide the manner in which operations will be conducted by a designated operator subject to the supervision of an operating committee. The main duty of the operator is to conduct operations in a diligent, safe and efficient manner in order to increase the profitability of the operations. JOA are most commonly conducted pursuant to a model form developed by an industry association, such as the Association of International Petroleum Negotiators (AIPN), the American Association of Petroleum Landmen (AAPL) and contain certain elements in common and ancillary provisions to address all the related issues.

\textsuperscript{34} Smith, op. cit., p. 492.
\textsuperscript{35} Makuch, op. cit. p. 212.
**Joint Study and Bid Agreements (JSBA)**

In the context of the JOA, where a number of several companies on a consortium basis planning to bid on a host country agreement for the award of a new license the JSBA, as a pre-development agreement and part of a pre-bid consortium arrangement, is intended to govern the relationship between them and the terms upon which their consortium will operate. JSBA governs the above relationship prior to the award of the license whilst the JOA governs the said relationship after the award, if the application is successful. The JSBA is a short-term agreement of practical importance and is developed as a model form by the AIPN containing the following terms regarding the role of the operating committee, grounds for removal of the operator, voting issues, non-consent and sole risk, approval of expenditure, withdrawal and relinquishment, decommissioning and force majeure\(^{37}\).

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Upstream Agreements during the Execution of Contract

Farm-out Agreements (FOA)

A FOA is a contractual agreement with an owner ("farmor") who holds a working interest (drilling rights) in an oil lease to assign all or part of that interest to another party ("farmee") in exchange for fulfilling contractually specified conditions (drilling and testing obligations). The agreement often stipulates that the farmee must drill a well to a certain depth, at a specified location, within a certain time-frame and carries the farmor for all or a portion for the drilling costs. Unlike the US farm-outs where it is typical for the farmee to become the operator and sole owner of the farmed-out interest, in the international farm-out agreements the farmee rarely becomes the operator and may not even be required to conduct any particular operational function.

In international FOA the parties have to take into consideration the fact that most host countries retain a right to approve any assignment of an interest in the exploration or production agreement. The most significant reason for farming-out is when a company is incapable of developing acreage due to budgetary constraints or wishes to reduce risk and is willing to accept in return a reduced acreage position. On the other side farming-in makes sense if a company’s budget can afford the drilling costs and the company is ready to accept greater risks in order to increase the percentage of its acreage position in a particular developing area. The most crucial terms and conditions negotiating in a FOA are the extent of the farmor’s maximum commitment when sharing exploration costs, the duty imposed to the farmee in order to earn interests in the acreage, what will be assigned to the farmee when the requirements are satisfied and what the farmor will reserve.

Unitization Agreements

In some instances an oil field may underlie two or more adjacent license or concession areas which are often held by different licensees or concession holders. The producers of adjacent licenses in order to avoid competitive development of the

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38 Smith, op. cit., p. 534.
reservoir that can lead to excessive drilling, wasteful production and controversies over property rights, they may decide to jointly develop common fields as single unit, according to the geophysical boundaries, to maximize efficient production from the common field. This process is known as “unitization” and can apply to several adjacent reservoirs in one country but also can apply to cross-border fields (e.g. U.K. and Holland) in the case of an intergovernmental agreement.

Unitization agreement basically is an agreement negotiated and entered into by the producers, combining all of the acreage in the developing fields and regulates the basis upon which the unitization will take place and the way the unitized field will be operated between the unitizing producers. The only available model form of unitization agreement has been developed by the AIPN and contains clauses regarding the intention of the producers to operate the field as a unit, the percentage interest to be held by each group and possibly provision for a redetermination of that interest, the appointment of a unit operator and an operating committee, the operator’s rights and duties, voting issues, ownership and disposal of the oil produced, expenditure and budgeting and other relevant to the development of the field issues.

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39 Picton, op. cit., p. 58.
Stabilisation Clauses

Given that oil projects span for a long term and are capital intensive are prone to political, regulatory, legislative and fiscal risks. In order to secure their investment during the life circle of the agreement through the stability of the contractual regime, IOC from the outset of their operations seek the use of risk mitigation tools to manage such risks arising from the demands of the host state to review the initial terms of their agreement. This practice reflects and is based on the public international law principle *pacta sunt servanda* (the sanctity of contracts).

Stabilisation clauses are a mechanism actually intending to stabilise the legal environment surrounding the oil contract and in particular the contents and status of the law of the host state in order to safeguard the IOC against any unilateral termination or modification in the agreement, by legislative, administrative act or any other means by the host state without prior mutual consent of the contracting parties that will affect the economic profitability of the venture and the contractual regime entered by the parties. Modifications preferred by the host state aiming to increase its take may be of various kinds such as by increasing present taxes, by enacting new taxes upon venture or imposing new obligations through legislation.

**Current features of stabilization clauses in oil contracts**

Stabilization clauses may take different forms in various different oil contracts. However, a distinction has been made between stabilization clauses “stricto sensu” (or freezing clauses) and the economic equilibrium clauses.

Under freezing clauses the legislation of the host state applicable to the contract is fixed on the day the contract is signed and applies until the conclusion of the contract. This means that the state agrees that any change to legislation enacted

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40 IOCs should always take into consideration the risk of expropriation and nationalization of investment projects.


42 Smith, op. cit., pp. 508-509.
after the date of the contract is signed will not apply to the contract, actually freezing the application of new legislation or regulations to the venture\(^{43}\).

The **economic equilibrium** clauses (or rebalancing clauses) are embedded in the rational that requires the agreement to be performed with the appropriate contractual **good faith**. In that context such clauses do not attempt to reject the application of new legislation upon the agreement but actually they function as indemnity clauses, by providing balance to the economic equilibrium of the contract ensuring that appropriate compensation is paid to the IOC if the state’s action adversely affects the economic benefits of the agreement\(^{44}\). This type of clauses are of practical use when expropriation occurs, since under international law a stabilization clause will not stop the expropriation, but it often will affect the measure of the damages that the company can receive in an arbitration proceeding\(^{45}\). It should be mentioned that economic equilibrium may not involve direct payment in cash to the company, but it could be achieved by adjusting the tariffs or reducing the taxes and royalties payable by the company to the host state or through an extension of the lifespan of the concession\(^{46}\).

In some instances, stabilization clauses may take the form of **intangibility clauses** (or **inviolability clauses**) which ensure that the host state cannot unilaterally modify or terminate the terms of the contract, without the mutual consent of the contracting parties. However, there is the argument that the legal effect of the stabilization clauses depend on the scope and the duration of the clauses. That was illustrated in the Kuwait v. American Independent Oil Company (Aminoil), where the arbitral tribunal refused to read a stabilization clause as preventing the state of Kuwait from nationalizing a concession for an especially long period of 60 years\(^{47}\).

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\(^{44}\) Chioma, op. cit., p. 4.


\(^{46}\) Oshionebo E., Stabilization contracts in natural resource extraction contracts: Legal implications for developing countries, Asper Rev. I.B.T.L. 2010, 10, L1, Asper Review of International Business and Trade Law, p. 3.

\(^{47}\) Ibid, p. 7.
**Stabilization clauses and environmental standards**

While stabilization clauses may be beneficial to the investors in the sense that they assure a stable and predictable investment environment however, there are concerns whether such clauses are of any benefit to the development aspirations of developing countries and to what extend the clauses have the potential to impede the capacity of the host state to regulate the activities of the IOC particularly in relation to environmental protection, health and safety regulations and human rights issues. A growing body of international and European law on environmental protection has emerged through considerable number environmental treaties which place obligations upon the states that are members to them to bring its national legal systems in line with the new international standards. Therefore, states cannot commit themselves not to take measures that they are required to receive concerning environmental standards under international or European law. Hence, the scope of stabilization clauses may be limited by a “compliance with international law” exception.

As an overview the trend is that investors tend to favour economic equilibrium clauses with clear compensation mechanisms over other types. Stabilization clauses are now limited to a few specific fiscal issues or rates and the host state holds the unilateral right to issue new regulations applicable to any contract-holder and take into account new environmental conditions, health, labour and safety priorities. Many developed countries (e.g. U.S.A., U.K., Canada, Norway, Australia) do not offer stabilization clauses because their fiscal systems are sufficiently stable minimizing the need for such devices. It could be said that in any case the presence of stabilization clauses in a petroleum contract should be considered as a psychological boost giving confidence to investors when they take the decision to invest and can thus, have an important market function in developing countries and at the same time act as a tool in order to attract investments.

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48 Ibid. p. 10.
50 Duval, op. cit., p. 141.
“Lex Petrolea”

Although the exploration and production of onshore oil is a global business involving transnational flows of capital, labour and equipment however, is largely regulated by national petroleum regimes. Despite the fact of the absence of a multilateral treaty which could regulate the petroleum business, by establishing specific obligations upon the participating parties of the petroleum arrangements, there has been a process of internationalization of domestic principles, laws and ways of conducting oil business, which has led to the development of many common legal principles applied worldwide in the petroleum industry\(^2\).

The development of Lex Petrolea

In order to provide a better picture of the legal regime of oil contracts, it is appropriate to consider the development and scope of *lex petrolea* which is a set of customary rules, valid for the international petroleum industry. It is developed based on four sources: i) national petroleum laws, ii) national and international dispute settlements and the relevant arbitral awards in the energy sector, iii) host governments’ contracts and iv) the industry’s business practice which is found in model contracts.

The term first arose in a benchmark international arbitration case in Kuwait v. AMINOIL\(^3\) in 1982. In an arbitration arising from the expropriation of AMINOIL’s petroleum concession through the nationalization of the oil industry by the Kuwaiti government, part of the dispute concerned the assessment of the relevant compensation. The government of Kuwait argued that a number of international negotiations and settlements about compensations in the period 1971-1977 had generated a customary rule specific to the oil industry – a *lex petrolea* that was in

\(^2\)Hunter, op. cit., pp. 34-35.

some sort a particular branch of a general universal “lex mercatoria”\textsuperscript{54}. The Arbitral tribunal rejected this characterization of these so called precedents as a lex petrolea\textsuperscript{55}.

One of the four potential sources of lex petrolea, the national petroleum legislations can be found now in oil producing countries, but while them may share a basic common framework, their terms vary and thus cannot be considered to provide laws of general acceptance or a model legal regime.

International oil business practices, which are found in model contracts prepared by international organizations or associations (such as AIPN), can also supply industry standards leading to the creation of new transnational common rules, because due to the fact that are widely used and accepted, they have the legitimacy and are accepted as part of custom and usage and hence the most credible source of lex petrolea\textsuperscript{56}. Additionally, lex petrolea will be supported by the notion of international “good oilfield practice” with the expectation to become industry standards and create common transnational rules. The definition of “good oilfield practice” indicates practices and procedures commonly employed in the petroleum industry by prudent and diligent operators relating particularly to resource conservation, operational safety and environmental safety and preservation\textsuperscript{57}.

Host governments’ contracts may contribute to the existence of lex petrolea even though there are no model host government contracts. However, in recent years we can observe the adoption of common types of host governments contracts as well as common principles, clauses, terms and conditions.

Lex petrolea development came through the published international arbitration awards of international arbitrators and arbitral tribunals comprising legal rules adapted to the industry’s nature and peculiarities. International arbitration is the major type of dispute settlement procedure for international petroleum industry. There are four categories of disputes found in the international petroleum sector and are either: i) between states, in the context of boundary issues concerning oil fields

\textsuperscript{54} Ibid.

\textsuperscript{56} Ibid.
\textsuperscript{57} Rouzaut, op. cit., pp. 186-187.
that cross international boundaries, ii) investors (IOC) and states, in the context of the investment disputes iii) between companies in relation to disputes arising from oil contracts and iv) between individuals and states. In order to determine the full extent of lex petrolea, we have to take into consideration the range of disputes in the oil industry which have been settled.

The subject of disputes ranges from the validity of E&P agreements, the application and issuance of the exploration licenses, project management, taxation, compensations in case of expropriation, the disposal of produced hydrocarbons, the transfer of interests in the project and force majeure to the frustration and repudiation of host government petroleum agreements and remedies for breach of contract\textsuperscript{58}.

\textsuperscript{58} Hunter, op. cit., pp. 29-32.
The EC Hydrocarbon Directive (94/22/EC)

As energy plays a fundamental role in our daily lives and is central to every aspect of economic activity, European integration has always been about energy issues. The continuously growing oil demand, the lack of sufficient domestic oil resources in many Member States, the necessity for reasonable oil prices plus the fact of supply shortages due to oil crises, resulted to the EU initiative for the completion of the internal market for energy products\(^5\). Therefore, the European Union adopted the Directive 94/22/EC (L. 164/3) on the conditions for granting and using authorisations for the prospecting, exploration and production of hydrocarbon in EC member states.

Directive laid down common rules which must be followed by the competing authorities when granting new licenses under the respective regimes\(^6\). The aim of the Directive was to make licensing procedures transparent by ensuring non-discrimination, equal access to all entities and that authorisations are granted on the basis of objective, published criteria known in advance by all entities taking part in the procedures\(^7\).

Moreover due to many areas of the Community are not yet explored, the function of the Directive was to open up the hydrocarbons market to greater competition by removing procedural barriers, reducing excessive state participation and lightening the burden of diverse regulations\(^8\), introducing at the same time the principle of reciprocity where Member States’ entities should enjoy in third countries a treatment comparable to that enjoyed by third countries’ entities in the Community.

**Principal Provisions**

Member States continue to have sovereignty over their hydrocarbon reserves and retain the right to determine which areas within their territories they will license. Member States may refuse awarding a license to an entity on grounds of national

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\(^6\) Taverne, op. cit., p.249.

\(^7\) In the recitals of the Directive 94/22/EC.

\(^8\) Park, op. cit., p. 209.
security or if the applicant is effectively controlled by third countries or third countries nationals. Further, Member States shall take the necessary measures to ensure that authorisations are granted following a procedure which is initiated either by a notice of the competent authority, inviting applications to be published in the Official Journal of the European Communities at least 90 days before the closing date for applications or by means of a notice inviting applications to be published in the Official Journal of the European Communities, following submission of an application by an entity without prejudice to Article 2(1). Other interested entities shall have a period of at least 90 days after the date of publication in which to submit an application.

Notices shall specify the type of authorization, the geographical areas or areas in part or all of which an application has been made and the proposed date or time limit for granting authorization. Some reasonable exceptions to the above procedure are included in Article 3(3).

Under Article 4, Member States shall take the necessary measures to ensure that the duration of an authorization does not exceed the period necessary to carry out the activities, including any extensions granted by the competent authorities under certain conditions in order to complete the proper activities. The objective of limiting a single entity’s reservation of exclusive rights over areas that could be better developed by several other entities is extended to both the extent of areas of authorization and to the duration of any authorization.

The licensing authority, under Article 5, can choose between competing offers and entities only determined on the basis of the following criteria: 1) The technical and financial capability of the applicant, 2) the way in which the entity propose to perform the relevant activities, 3) whether the authorization is put up for sale and tenders are invited, the price which the entity is prepared to pay in order to obtain the authorization, 4) where two or more applicants have equal merit, when assessed according to the specific criteria, the competent authorities may take into account any other objective and non-discriminatory criteria in order to make a final choice among these applications. The authorities may also take into consideration, when appraising

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64 Art. 3, para. 2 of the Directive 94/22/EC.
their applications, any lack of efficiency and responsibility displayed by the applicants in operations under previous authorisations. Any changes made to the conditions and requirements in the course of the procedure are notified to all interest entities. Further, any entity, whose license application is unsuccessful, the entity may request to be given explanations and the reasons for the decision.

Under Article 6 of the Directive Member States may, to the extent justified by reasons such as of national security, public safety, public health, protection of environment, safety of installations and of workers, planned management of hydrocarbon resources, the need to secure tax revenues and due to any other reason of public interest, to impose conditions and requirements on the exercise of the activities of prospecting, exploring for and producing hydrocarbons.

In the case of state’s participation, a Member State may continue with the provision that a “Chinese wall” exists between the Member State as a licensing authority and the Member State as the participating licensee, usually through a joint development agreement. The Directive requires the state that holds the authorisations and the state as legal entity managing the state’s share to abstain from voting on procurement matters and not exercise a majority voting control on other decisions. Any flow of information between these two entities is subject to appropriate limitations, as well as any vote by the state or the legal entity shall not prevent the management decisions of the entity from being based on normal commercial principles. Also the State shall put in place arrangements requiring the said legal entity to keep separate accounts for its commercial role and its role as a manager of the State’s participation and guaranteeing that there is no flow of information between these two entities.

The Hydrocarbon Directive is far from perfect in its contribution to an internal energy market. It leaves considerable gaps in terms of remaining governmental discretion, residual obstacles for external companies in competition against, and negotiations with, state-owned petroleum companies and the possibility of a Member State cutting an informal deal with a non-Member State on terms of reciprocal access, thereby excluding companies from other Member States. However, it is considered an

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65 Park, op. cit., p. 209.
66 Art. 6 (3) of the Directive 94/22/EC.
important step forward in providing specific rules accepted by governments and the industry making Europe a more attractive venue of oil field development.67

Selected Countries’ Licensing Regime

GREECE

Despite the fact that Greece is a country of hydrocarbon potential, almost all of the crude oil used in Greece is imported in order to cover country’s energy needs because the upstream sector is not yet developed enough. However, Greece has implemented comprehensive energy sector reforms towards creating competitive energy markets by promoting hydrocarbon activity through an investment friendly regulatory framework. The market has changed and opportunities are revealed for investors, helping the Greek E&P activities to undergo significant restructuring, thereby providing economic recovery and generally sustainable growth for the Greek society.

Recent Hydrocarbon Developments

In this regard the Greek state launched an open tender (“with open door invitation”) in 2012 and in 2014 and three exploration licenses (lease agreements) were signed between the Greek state and three consortia, for one onshore (Ioannina) and two offshore blocks (Katakolo and West Patraikos Gulf). Also it was granted a 25 years exploitation license in 2016 for an area in Katakolo block with expecting production from the block starting by 2019-2020.

Due to this confidence shown by investors in the Greek upstream sector, HHRM is planning to launch a new bidding round in 2018 for the rest offshore blocks that did not receive bids in 2014 and inviting bids for new exploration onshore blocks in Northern Greece.


70 Ibid, p. 33.

71 A state authority for promotion of the upstream hydrocarbon activity overseen by the Minister of Environment and Energy.

Regulatory Regime

Law 2289/1995, which has transposed the 94/22/EC on the conditions for granting and using authorisations for the prospection, exploration and production of hydrocarbons, constitutes the applicable legal framework governing the upstream hydrocarbons operations in Greece. Law 2289/1995 was further amended by law 4001/2011 which updated the legal framework, by incorporating new practices, such as the “the non-exclusive seismic surveys” and “open door” bidding process, and established a new state authority for the promotion of the hydrocarbon upstream practice: the Hellenic Hydrocarbon Resources Management S.A. (HHRM)\(^73\).

All of the rights and obligations relating to the prospecting, exploration and production of hydrocarbons are vested in HHRM\(^74\), which has the management and monitoring of the existing state agreements, the conduct of all relevant exploration and production tenders as well as the evaluation of offers received. The exploration and production rights may be granted through the conclusion of a lease agreement or a production sharing agreement\(^75\). PD 127/1996 sets the basic terms and conditions regarding the lease agreement, while Law 2289/1995 sets forth the general terms and conditions in relation to the production sharing agreement. Greece is committed to all relevant international protocols, agreements and EU legislation, actively encouraging best practices and recently has adopted the 2013/30/EC Offshore Safety Directive under Law 4409/2016\(^76\).

Granting of the prospecting right

HHRM issues an invitation for submission of applications for prospecting hydrocarbons that is approved by the Minister of the Environment, Energy and Climate Change and is published properly in the Government Gazette and in the Official

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\(^{73}\) By virtue of the Presidential Decree (PD) 14/2012 (OGG 21/A/2012).

\(^{74}\) It is also responsible for the preparation of the relevant contracts the supervision of their appropriate performance, the preparation of all environmental protection, labour, safety and security regulations that will govern any oil company in Greece.


Journal of the European Union. Indicatively, the invitation includes the area that shall be subject to prospecting, the terms and obligations of the licensee, the criteria for the selection, the amount of the fee payable, the deadline for the granting of the license (which is approved by the Minister and shall be valid for up to eighteen months) and any other relevant information.

**Granting of the exploration and production right**

According to Article 2 of the Law 2289/1995, the exploration and production rights are granted for block areas either:

i) By following an invitation to tender, approved by the Minister, and published in the Government Gazette and in the Official Journal of the European Union.

ii) Or following the submission of application by an interested party for an area not included in the invitation to tender.

iii) Or through an open door invitation for expression of interest, if the area under discussion is available on a permanent basis or has been subjected previously to a tender that was not completed with an execution of a lease or a PSA, or has been abandoned by the contractor.

The offers are evaluated following negotiations with the interested parties and the one most financially advantageous to the Greek state is selected.

The duration of the exploration stage is 7 years for onshore areas and 8 years for offshore areas. It is usually divided in three phases each one linked to a separate work program and either at the end of each phase will enter the succeeding phase or will withdraw from further commitments. The production stage shall have a maximum duration of 25 years from the date on which the contractor notifies the Greek state that it has tracked down a commercially exploitable crude oil deposit.

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77 The submission deadline of the applications is specified in the invitation and cannot be less than ninety (90) days from the last publication.


79 As it is amended by L. 4001/2011.


81 Article 5(1) L. 2289/1995 as amended by Article 158 (1) L. 4001/2011

for both stages may be approved under specific terms and written consent of the
Lessor described in the Agreement\textsuperscript{83}.

In the invitation to tender apart from the requirements for participation and
the evaluation criteria (e.g. minimum financial capability and technical expertise of the
interested parties) shall also include the royalty offered by the interested parties in
case of a lease agreement and the participation share of the hydrocarbon offered to
the Greek state in case of production sharing agreement, as well as the signature
bonus, the production bonus and surface fees.

Regarding to dispute settlement all disputes among the parties related either
to the performance of the terms of the agreement or to any non-contractual liability
shall be settled through arbitration, international commercial arbitration or any other
internationally recognized arbitration system such as the International Chamber of
Commerce (ICC) or the Arbitration Institute of the Stockholm Chamber of Commerce,
excluding ordinary proceedings of the Greek courts or other court jurisdictions.
However, it is provided that the parties for a number of serious disputes shall be
referred for determination to a Sole Expert.

\textbf{Taxation Regime}

According to the applicable legislation\textsuperscript{84} the contractor shall be subject to a
special income tax, at a rate of 20\% and to a regional tax at a rate of 5\% without any
additional ordinary or extraordinary contribution, duty or other encumbrance of any
kind, in favour of the state or any other third party. Income tax shall be imposed
separately on the contractor’s income deriving from each of the agreements
concluded by it. In case the contractor is a joint venture, the income tax will be
calculated and imposed separately for each participating member.

Although Greece has been out of the oil market in the fields of exploration and
production, with the implementation of the energy reforms and the establishment of
an investment friendly legal regime is able to promote market competition and ensure


\textsuperscript{84} Article 8(1) of L. 2289/1995 as amended by Article 161(1) of L. 4001/2011.
the participation of reliable oil companies in the development of upstream oil activities.

**UNITED KINGDOM**

U.K. even though is still considered a net importer of crude oil, it has a long history of oil and gas production and still remains one of the largest oil producers having onshore production since 1930\(^85\) and much more large-scale offshore oil production.

Almost all U.K. oil is produced in the North Sea area of the UK Continental Shelf (UKCS) even though it is now considered as a mature basin since the reserves are becoming progressively depleted and all the major discoveries have now been made. Due to this fact U.K.’s government objective is to ensure that no economically developable hydrocarbons are left stranded and to maximize the economic recovery of petroleum from UKCS (MER UK strategy).

**Regulatory regime**

The law governing the development of hydrocarbons in the U.K. is the Petroleum Act 1998 which vests ownership of the United Kingdom’s petroleum resources in the Crown and has granted regulatory responsibility in general for oil and gas industry to the Secretary of State for the Department of Energy and Climate Change (DECC). The Petroleum Act 1998 is supplemented by the Infrastructure Act 2015, by the newly Energy Act 2016 and various environmental and health and safety legislative provisions. A number of changes have been introduced by the Energy Act 2016, with the most significant the creation and establishment of a new independent regulator- the OGA (Oil and Gas Authority)\(^86\).

OGA\(^87\) has inherited the licensing responsibilities from DECC and is the sole entity in charge for the granting of licenses for exploration and production of petroleum in the territorial waters of U.K. and on the UKCS, but the method of

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\(^85\) The first onshore license was issued in 1935. (Tordo et al, op. cit., p. 63.)


\(^87\) It is a government company with new regulatory powers including the ability to participate in meetings with operators.
obtaining the license remains similar to the existing one. OGA acts on its own initiative to issue non-binding recommendations in relation to relevant disputes between the operators and have the power to impose sanctions for breach of petroleum related requirements\(^8\).

**Exploration and Production Licensing**

The principle distinctions of licenses are between exploration and production licenses and between onshore and offshore licenses and particularly there is a Seaward Exploration License and a Landward Exploration License\(^9\).

Production licenses are distinguished in Seaward Production Licenses and a Landward Production Licenses and cover both exploration and production and run for three successive periods or terms (initial term, second term and third term). Each period is associated with a particular activity (e.g. the initial term is associated with exploration and the third term is associated with production). The license requires fulfillment of the relevant work programme before it can proceed from one term to the next\(^10\).

Offshore Innovative License replaces several earlier forms of the Seaward production license: The traditional production license, the promote license and the frontier license\(^1\). The Innovative license offers greater flexibility during the initial and second terms (which was the main difference between the older license types). An applicant for innovative license can propose the durations of the initial and second terms. The initial term is now subdivided into up to three phases (phase A, phase B and phase C) with the work programme being correspondingly divided. Phase A is a period for carrying out geotechnical studies and geophysical data reprocessing, Phase B is a period for undertaking seismic surveys and acquiring other geophysical data and phase

\(^{88}\) Oil and Gas Authority, [https://www.ogauthority.co.uk/about-us/what-we-do/](https://www.ogauthority.co.uk/about-us/what-we-do/) accessed 22/1/2018.

\(^9\) Ibid.

\(^{10}\) Mace, op. cit.

\(^{1}\) The traditional license had a term length of 4 years for the initial term, 4 years for the second term and 18 years for the third term. The promote license was aimed to start-ups and small companies and applicants did not have to prove financial and technical capability before the award of the license but they had to do so within two years of the start date of the license. The frontier license intended for major companies capable of investing in a challenging and difficult environment and had an exploration phase of 6-year initial term followed by 6-year second term and an 18-year production period, while for the Atlantic margin area had a 9-year initial term (Hunter, op. cit., p. 115-116.)
C is the drilling phase. While phases A and B are optional and depend on the applicant’s plans, every work programme must have at least Phase C\textsuperscript{92}.

OGA issuing licenses through competitive licensing rounds every year. Separate rounds are held for seaward (offshore) and landward (onshore) licenses, while where there are compelling and justified reasons OGA may issue an out-of-round license. During a formal licensing round, the OGA invites application for a specific acreage\textsuperscript{93}. A company (either by itself or as part of a joint venture) may apply for a specific licensed area and OGA in order to award a license is focused not to the highest bidder but on the extent of the proposed work programmes and the financial and technical capability of the applicant to complete such work programmes.

The OGA then publishes a summary of successful bidders’ marks and work obligations. Once the license is granted the OGA consent is required for the progression through the license phases, for carrying out drilling, for the development and cessation of production activities\textsuperscript{94}. Each license takes the form of a deed, which binds the licensee to observe the conditions of the license. Secondary legislation made under the Petroleum Act contains these detailed conditions (model clauses) governing issues such as implementation of development plans, working methods, work programmes, measurements and the relinquishment of certain proportion of the license area\textsuperscript{95}.

Taxation regime

The tax regime which applies to exploration for and production of oil in U.K. currently comprises three elements: i) Petroleum revenue tax (PRT, now effectively abolished), ii) Ring-fence corporation tax (RFCT) and iii) Supplementary charge (SC).

PRT\textsuperscript{96} was a field – based tax charged on the profits arising to each participant from the production of oil under a license and applied to fields for which development consent was given before 16 March 1993.

\textsuperscript{92} Oil and Gas Authority, op. cit.
\textsuperscript{93} The OGA operates an e-license administration system (the Petroleum E-Licensing Assignments and Relinquishments System (PEARS) for the submission of license assignment applications for offshore production licenses.
\textsuperscript{94} Strong, op. cit., p. 297.
\textsuperscript{95} Picton, op. cit., p. 30.
\textsuperscript{96} PRT levied at a rate 0% from 1 January 2016 and is charged on a field-by-field basis rather than an entity-by-entity basis. In EY, Global Oil and Gas Tax Guide 2017. Available from:
RFCT is a modification mechanism of corporation tax that oil companies, like all other companies, are subject by way of a “ring-fence\(^97\)”. The current main rate of tax on ring-fence profits is 30%, despite the continuing cut in the main rate of corporation tax\(^98\).

SC constitutes an additional charge on ring-fenced profits without any deduction for financing costs and its current rate is 10%.

United Kingdom passes a critical period of its history due to the decision to leave the European Union and is in the procedure to set out the post-Brexit life in many sectors. Thereby, it is extremely reasonable to be considered that with time the relevant energy regulatory regime may be amended. However, there is no indication that Brexit will have an immediate impact on the upstream oil industry in the short term, since much of the oil regulation governing oil operation is of U.K. origin and it seems that there will be no political will to repeal laws based on EU legislation that have already been implemented into domestic law\(^99\).

**FRANCE**

Oil is a very important energy source in France, constituting the 45% of the French energy balance. However, despite the fact that France is a net crude oil importer, because there is no substantial national production, the government recently took the decision to pass a legislation in order to stop issuing new oil and gas exploration and production licenses on its mainland and overseas territories by 2040\(^100\). The extension of current concessions will be gradually limited until they are phased out. However, the decision is not going to affect oil upstream sector largely, since the amount of France’s domestic production is only equivalent to 1.5 % of its total demand.

\(^97\) The ring fence prevents taxable profits from oil and gas extraction in U.K. and UKCS being reduced by losses from other activities or by excessive interest payments.

\(^98\) Oil and Gas Authority, op. cit.

\(^99\) Strong, op. cit., p. 306.

Regulatory Regime

The New Mining Code¹⁰¹ (NMC) and the Energy Code¹⁰² constitute the main legal framework governing the exploration and production oil activities. The Ministry for the Ecological and Inclusive Transition is the relevant governmental authority responsible for the hydrocarbon sector. The Department of Energy and Climate¹⁰³ is responsible for defining and implementing the French energy policy and within DGEC the Hydrocarbons Exploration-Production Bureau manages the French mining (hydrocarbon) sector and is responsible to award and renew the exploration and production licenses. Disputes related to the mining sector are settled before the French administrative and civil courts. The Prefects (“Prefets”) are representative of the state responsible for examining research operations, authorizations and applications.

Exploration and Production licensing

The right to oil and gas are publicly owned and the exploitation of oil resources can be performed directly by the state or through a privately operated concession¹⁰⁴.

The NMC identifies three exploration regimes: i) depending on whether the owner of the surface area in question is conducting or consented to the exploration works following a declaration to the competent administrative authority, ii) the competent administration authorized the exploration works to be carried out without the landowner’s consent, once the landowner has been formally invited to present his observations or iii) exploration works are carried by the holder of an issued exclusive exploration license¹⁰⁵.

The landowner prospecting its own property is a consequence of his right of ownership and a normal use of this right. However, if his land is within the scope of a

¹⁰³ In French (DGEC).
¹⁰⁵ Ibid.
concession, of an exploitation permit or an exclusive exploration permit then the landowner is not allowed to carry out prospective works any more.

The authorization from the competent administrative authority, in the absence of the landowner’s consent allows the operator to occupy the land and proceed with the prospection works by sending request to the Prefects, which after examining the request and with the decision of the Minister of Mines by way of an order, with the obligation to pay indemnities to the landowner in consideration of the nuisance resulting from the activities. This authorization does not grant the prospector any exclusivity on the land, as two prospectors may conduct exploration works on the same land. In practice exploration works are rarely conducted under such regime and are usually undertaken either with the landowner’s consent or under an exclusive operation permit.

The holder of an H permit is vested with an exclusive right to undertake exploration works within the area defined in the permit and may freely dispose the products that might be extracted as a result of such exploration activities. An H permit is granted for a maximum initial five-year period, after a competitive bidding process. It may be renewed twice for an additional minimum three-year period and a maximum five-year period, without being subject to a competitive procedure, but subject to the permit holder’s compliance with its obligations.

Oil reserves may only be developed under a concession granted by decree of the Council of State following a public enquiry and a bidding process if the developer has sufficient financial and technical capacities. The process of obtaining a mining concession is largely similar to the one described regarding the exclusive exploration license.

According to the NMC only the holder of an exclusive research permit in force may obtain a concession within the acreage and for the substances mentioned by the permit. In addition the holder of an exclusive research permit has the right, if the request is made before the expiry of the permit, to the granting of concessions over

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106 An H permit is granted after an application to the Ministers for the Economy and the Environment. The application must contain documents identifying the applicant, a technical report, the contemplated work programme, a minimum financial commitment that the applicant is prepared to invest in the concession, cartographic documents and impact assessment.

107 Strong, op. cit., p. 81.

108 Ibid, p. 79.
the deposits that have been discovered and may be exploited during the period of the validity of the aforesaid permit.\textsuperscript{109} The concession is granted for a maximum 50-year period and may be extended for additional periods of time that may not exceed 25 years each.\textsuperscript{110}

Taxation regime

The holders of the concessions are bound to pay on an annual basis, a royalty payment to the state at a progressive rate and calculated on the production. The rates for the royalty payment for oil and gas developments differentiate between former and new productions. Former productions include all wells in operation before 1 January 1980, through traditional means of production. Any other production is deemed a new production.\textsuperscript{111}

In addition to the royalty regime operators are subject to corporate income tax due on French-source taxable profits at the rate of 33.3%. There are several other taxes that must be paid, such as a social surtax, consumption tax on petroleum products and VAT on oil products, however there are no royalties on offshore production.\textsuperscript{112}

\textsuperscript{109}Ibid.
\textsuperscript{110}Article L. 132-11 of the NMC.
\textsuperscript{111}Concerning the crude oil, the rate for less than 50,000 tons per tranche of annual production, amounts to 8% for former production and 0% for new productions. For 50,000 tons to 100,000 tons per tranche of annual production, amounts to 20% for former production and 6% for new productions. For 100,000 tons to 300,000 tons per tranche of annual production amounts to 30% for former production and 9% for new productions. For more than 300,000 tons per tranche of annual production amounts to 30% for former production and 12% for new productions. In Lauriol, op. cit.
Health, Safety and Environmental (HSE) issues

Exploration and production oil activities are considered as dangerous and polluting industry sector since involves the processing of high flammable and explosive materials, affecting and putting at risk the environment and the persons carrying out or involved in these activities. The main risks are associated with oil well eruption at the drilling or production site, the rupture of a pipeline and the subsequent massive release of oil into the environment, the disposal of waste products generated in the course of the petroleum operations, especially during the decommissioning of production installations at the end of production life of an oil field\textsuperscript{113}. Other types of risks are the temporary or permanent occupation of a portion of the land or sea surface or the sea bottom required for drilling locations, for the installation and building of offshore oil facilities. In the oil industry one of the key safety challenges regarding the equipment and installations is asset integrity in terms of whether the offshore installations for example continue to operate beyond their design life.

Some oil production operations have resulted in serious accidents with the consequences and externalities occurring at regional, local, national and international levels and most of the times have been catastrophic in term of casualties, environmental pollution, lost of investment and depending on the circumstances company’s reputation damage. In general there is the impression that the environmental concerns get significantly greater attention in oil contracts than concerns relating to health, safety and social impacts\textsuperscript{114}. However, HSE risks have always been important to the oil industry, which works to improve safety in the workplace through ongoing research, standards development, training and sharing of recommended practices usually committed not only to the safety and health of its employees and contractors but also to the communities they operate.

\textsuperscript{113} Taverne, op. cit., p. 12.
\textsuperscript{114} Social impacts as a notion may include increases in the price of local products and services since the commencement of E&P operations in certain area, immigration into the project area causing several problems that should be resolved, resettlement and compensation and potential human rights implications to indigenous peoples.
**HSE Regulation**

There are several provisions in petroleum contracts dealing explicitly with HSE issues which if properly executed and when taking all the reasonable precautionary measures, then the operation of petroleum facilities onshore and offshore does not present a danger for human health, safety and the environment in general. Indicatively there are terms to ensure that when harm occurs, oil companies take responsibility for such harm and are able to meet the costs of mitigating it, including requirements for insurance and allocating liability. In an oil contract is also common to find a provision to ensure that at the end of oil operations the environment is so far as possible, returned to the state it was in before the oil operations started (decommissioning phase). In the case the petroleum contracts do not contain such explicitly provisions definitely a reference to national laws and regulations (planning, environmental), international laws and conventions or to international standards and “good oilfield practice” is incorporated providing substantial protection.

HSE issues are regulated by the national laws and the competent authorities. Therefore, oil companies before they commence of any exploration or production activity must perform a thorough assessment of the national statutory requirements regarding HSE issues in the countries in which they operate. It is conceded that there are differences between the legal regimes applied with one of the differences between safety and health governance schemes to be related as to whether countries have prescriptive or performance-based approaches to regulation. In the prescriptive regime the regulator is responsible for ensuring that operators meet clearly defined requirements (used in U.S.A.) whereas in the performance-based regime the operators have greater responsibility and are encouraged to innovate (used in Norway)\(^{115}\).

Differences also exist in the legal and regulatory system regarding HSE issues between developing and developed countries as host countries. Developing countries have different levels of laws, environmental awareness and politics and may accept less stringent HSE standards in exchange for more revenues. However, the last years

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particularly regarding environmental issues, it can be said that laws requiring environmental insurance, oil spill response capability, environmental audits and decommissioning funds are also becoming common in the legislation of the vast majority of the producing countries. Devices used in many developed countries such as suspension or cancellation of licenses, fines and criminal penalties, environmental charges and taxes are spread globally\textsuperscript{116}.

Within European Union for example, all Member States must incorporate into their national laws and implement all the Directives regarding the energy sector and the environmental protection.

Environmental legislation falls into a number of different categories divided into anticipatory and continuing controls. Anticipatory controls relate to the planning and consent stage of most operations in order to prevent or mitigate any environmental impact, whereas the continuing controls relate to the operational phase and controls whether the activity is carried on properly or not\textsuperscript{117}. Therefore, under the contractual terms or the legislation the IOC may be required to include description of the project, the applicable legislation, prediction of possible risks and impacts the project might have on the environmental and social situation. Further, environmental audits, an anti-pollution plan which include an analysis of the sensitivity of the local environment, monitoring programme and consideration of alternatives and mitigation measures or management actions to offset the potential risks, should be reported in an impact assessment.

It is clear then that it is on the side of the host country, in which the oil company is operating, to dispose the means in order to monitor and enforce compliance with the legislation.

\textit{Best Practices and Standards}

In the absence of international law standards, national statutes or contractual provisions for HSE issues, many industry trade associations\textsuperscript{118} and other organizations

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\item[\textsuperscript{116}] Smith, op. cit., p. 808.
\item[\textsuperscript{117}] Park, op. cit., p. 166.
\item[\textsuperscript{118}] E.g. the American Petroleum Institute (API), International Petroleum Industry Environmental Conservation Association (IPIECA), International Oil and Gas Producers Association (OGP). There are also several regional and national petroleum associations e.g. Australian Petroleum Production and
\end{itemize}
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have developed writing codes of conduct of best practice guidance addressing HSE issues (soft law) applicable internationally, which may fill some of the gaps in the regulatory mechanisms and are commonly used by judges and arbitrators to determine the meaning of “good oilfield practice”\(^\text{119}\).

Companies have fully documented and effectively implemented management systems and standards for HSE performance. An important mechanism which provides recommendations and guidance to the activities related to the oil industry is the International Organization for Standardization (ISO) which provides universal industrial standards for the oil industry. A number of core ISO standards exist for use from the oil companies, such as ISO 14001 for controlling environmental impact and improving environmental performance, ISO 45001 which sets requirements for occupational health and safety (OHS) management system and is designed to help companies and organizations to ensure the health and safety of workers, ISO 19906 which specifies the requirements for the offshore structures regarding the oil and gas activities in Arctic and cold regions\(^\text{120}\).

The ILO international labour standards provide the minimum legal framework and essential tools for governments, employers and workers to establish such practices in order to promote OHS and setting forth the principle that workers should be protected from sickness, disease and injuries arising from their employment.

Globalization and technological progress have transformed the oil business and nowadays societies expects more from oil companies and particularly demand IOC to incorporate HSE issues into the business decision-making process for projects all around the world and even in the most sensitive environments such as deep offshore, tropical forests or the Arctic tundra. The public largely believe that the oil industry has done little if anything to contribute to sustainable economic development in host countries in which it operates. However, at present oil industry has to operate on the basis of three inseparable imperatives: economic development, social responsibility

\(^{119}\) Smith, op. cit., p. 812.

\(^{120}\) Other types of ISO are ISO 31000 which provides standards on risk management, ISO 26000 provides guidance on social responsibility, International Labour Organization (ILO), op. cit., p. 18.
and environmental protection\textsuperscript{121}. The most apparent change in the HSE management is the fact that public interest groups seek, and indeed have, a voice in decision-making process through public consultations while at the same time commitments made by the oil industry are now published externally. Safety and environmental management should be an integral part of the business, if responsible operators aim to be perceived by the public as being part of the solution to HSE issues and not the source of the problems.

\textsuperscript{121} Rouzaut, op. cit., p. 286.
Conclusions

Countries with petroleum resources in their subsoil dispose an energy treasure which must be exploited. Their governments hence, have strong incentives to employ private companies in cases involving high risks by applying the proper fiscal and political manipulations and regulatory framework. The petroleum policy is based on certain priorities such as financial viability and efficiency, political consistency and social objectives, transparency and accountability, determining the relationship between petroleum-producing countries and oil companies.

Despite the fact that the types of contracts used in the upstream oil industry remain the same however, contract terms especially those associated with the fiscal regime significantly change in order to attract investments and upgrade the degree of competition of the contract area and of the country in general. It could be said, that the proper use and application of stabilization clauses improving the fairness of the contracts and the procedures awarding E&P rights which are becoming more transparent aiming to eliminate any discrimination, provide a regulatory “safety net” for future investments.

It is obvious that negotiating the contractual provisions in the proper contract form is critical for governments and the investors so they can optimize the benefits deriving by their interaction. Governments’ objective on the one hand is to reap the significant benefits from the exploitation of its natural resources aiming to obtain capital for social and economic development especially in periods of severe economic crisis. The IOC on the other hand have become more selective regarding the investments due to budgetary constraints especially in periods when oil prices are low thus, their objective is to protect themselves against possible losses and to operate in a safe and challenging environment.
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