



Colonel Edwin Drake



Commercialising the oil and gas sector



Internationalisation of the oil and gas industry



The Concessionary system



The service agreements



The Production Sharing Agreements

Upstream Oil and Gas Contracting Regimes

Through the Optics of History

1. Introduction

In this publication, we provide a high level discussion of the three main contracting regimes in the upstream oil and gas sector through the optics of history. These are the concessions, production sharing agreements (PSAs) and service agreements. The upstream sector is one of the three segments of the oil and gas industry the others being the midstream and downstream though some legal regimes combine the midstream with downstream. The upstream also known as exploration and production (E&P) finds and produces crude oil or hydrocarbons. The midstream processes, stores, markets and transports hydrocarbons. The downstream encompasses oil refineries, petrochemical plants, petroleum products distributors, retail outlets and natural gas distribution companies.

2. Colonel Edwin Drake

The oil and gas industry would probably not be as gigantic as it is today if it were not for the efforts of "Colonel" Edwin Drake. The ground breaking technology that he devised to drill the first underground oil well in the United States transformed petroleum extraction launching the modern commercial oil and gas industry. Prior to this, crude oil had been gathered around surface leaks where it arose naturally from the ground which did not yield sufficient amounts to justify commercial investments.

It is Drake's resolve and determination that kept him going. His business partners abandoned him when the drilling venture at Titusville, Pennsylvania, United States was coming to naught. He was nicknamed the crazy man and occasionally crowds gathered and jeered at him at the drilling site for his apparently pointless and unproductive activity. His steel determination however enabled him to steer past the discouragement.

At the point he was giving up his operation on 27th August 1859, he struck the much coveted oil that gushed from the ground and this discovery went on to change the world. Though he died a poor man because he did not patent his technology, his invention led to the accelerated growth of the oil and gas industry and the rise of oil moguls.

3. Commercialising the oil and gas sector

Drake's invention on 27th August 1859 is widely recognised as marking the modern phase of the upstream oil and gas industry. There was a rush for investment in the value chain of the oil and gas industry not only in Pennsylvania but across the United States. Crude oil could now be efficiently extracted in commercial quantities for refining into kerosene that was used to light lamps.

As it is today, the oil and gas industry has always been volatile, uncertain, complex and ambiguous. In the 1870's, the future of the nascent global oil and gas industry was threatened by Thomas Edison's invention of the electric light bulb which made the use of kerosene nearly obsolete. In 1885, German Engineer Gottlieb Daimler however revived the sector fortunes with the invention of the four-stroke gasoline internal combustion engine. Primarily powered by gasoline that was processed from crude oil, the internal combustion engine radically altered the commercial use of crude oil which has endured to date. The growth of the oil and gas industry continued unabated. Almost everything used in our day to day lives including clothes, medicines, plastics, fertilisers, paints among others are processed from crude oil via the petrochemical industry.

4. Internationalisation of the oil and gas industry

Though the US dominated the early modern oil and gas industry, other countries soon followed suit with the realisation of the energy potential of crude oil. Russia started pumping its oil to the greater Europe at the end of the 19th Century and the United Kingdom heavily relied on the Middle East for its crude oil supplies at the beginning of the 20th Century. The demands of World War one where motorised automobiles were used for the first time fuelled yet more growth for the oil and gas sector with countries each vying to control access to petroleum resources. Oil became a strategic resource after World War one. The huge crude oil discoveries in the Middle East thereafter also caught the attention of the United States, European countries and Russia. In the quest for energy security, oil thus became a central factor in some of the most complex geopolitical struggles still playing out today.

5. The Concessionary system

The earliest form of contracting for the upstream oil and gas sector was the concessionary system that was derived from the already well established mining industry. The concessionary system originated with the very beginning of the modern petroleum industry in mid-1850's and still predominates in the Organisation for Economic Co-operation and Development ("OECD") countries. As the term implies, concessionary systems allow the private ownership of resources which is rooted in the Anglo-Saxon legal tradition. Ownership of the petroleum is vested into the International Oil Companies ("IOCs") at well-head, subject to the payment of royalties and taxes.

The earliest or traditional concessions covered large exploration areas sometimes the entire territory of the host countries. The agreements were for long periods usually in excess of 50 years. Host states were not involved in exploration and production decisions which sometimes caused delays in the projects. Host countries would receive royalty payments and sometimes periodic rental payments but they were not a major financial consideration. Though included, signature bonuses were modest in size.

Following the end of World War two and the raging nationalistic sentiments that developing countries embraced then, the provisions of these early concessions led to conflicting positions between the host countries and the IOCs. The host countries desired to generate more economic benefits from their natural resources while the IOCs' asserted the doctrine of sanctity of contracts implying that the terms of the traditional concessions had to remain untouched.

Traditional concessions evolved into modern ones. Under the modern concessions, host states gained a more prominent role in the control of the exploitation of their natural resources. They were also able to obtain more wealth from their petroleum reserves. The modern concessions covered more restricted areas of exploration with relinquishment provisions if the IOCs defaulted in the execution of the exploration work programmes they committed to. There were also obligations to train locals and government officials to progressively acquire the expertise and experience of managing oil and gas projects.

6. The service agreements

Service agreements are either risk service (RSA's) or pure service agreements. Under a pure service agreement, the IOC explores and produces the crude oil for a fee with the host state bearing the exploration and development risks. Payment of the service fee is usually made in cash and not in kind as is the case under the PSA unless there is a crude oil buy back clause. RSAs on the other represent arrangements where the IOCs provide the capital but also bear the exploration and development risks.

RSAs differ significantly from the traditional concession. The IOC is a contractor of the host country performing at its own risk exploration and in the event of a commercial discovery, the development and production of oil and gas. RSAs have some resemblances with the PSAs in the sense that the IOC bears the financial risks and is reimbursed for its "sunk" costs only if it succeeds in commercialising production. The difference lies in the mode of sharing the profit oil. Under a PSA, the contractor is entitled to a predetermined share of profit oil. Under an RSA, the contractor's cost recovery and profit share are determined according to a mutually agreed upon formula.

7. The Production Sharing Agreements

PSAs were popularised by Indonesia in the 1960s a period of raging nationalistic hostility towards IOCs and their concessions. Developing countries had been biased against concessions based on the very unfair terms that the classical concessions contained. PSA's were reluctantly accepted by IOCs and are now the leading system for allocating petroleum rights to oil companies in developing countries.

Under the PSA, ownership and the right to exploit the petroleum resources remains with the state but an IOC is hired as a contractor to undertake the exploration and exploitation activities. The state retains title and ownership of petroleum extracted but the contractor is reimbursed costs incurred by way of entitlement to a portion of that oil and additional share of profit oil. The contractor bears the exploration and development risks and is not compensated in the event of project failure.

Host government participate actively in the control of the oil and gas sector under the PSA contracting regime. PSAs provide for more restricted geographical areas and exploration durations. This allows the expedition of exploration programmes and the unexplored areas periodically surrendered. Local and government personnel are also trained in petroleum related skills.

8. Conclusion

There are no hard and fast rules regarding the most suitable upstream oil and gas contracting regime. The political history and economic expectations of a country largely influence this. The upstream oil and gas sector is a high risk venture that requires significant capital and technical expertise that developing countries lack. In this regard, service agreements and PSAs can help developing countries attract foreign capital but also retain control over the exploitation of their hydrocarbon resources.

It is understood that the IOCs have preference for the concessionary system. This is because it allows them to book as reserves all oil discoveries at wellhead subject to the payment of royalties and reserves. During periods of high oil prices, the market valuation of IOCs increases more under the concessionary system. Though developing countries are biased against the concessionary system for historical reasons, concessions can actually be adapted to generate similar economic returns as PSAs. IOCs are not very keen on service agreements and host countries hoping to attract significant foreign capital in their oil and gas sector may struggle with this kind of contracting regime.



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At Deloitte, he lived and worked in Uganda, Kenya, Tanzania and the United Kingdom for over 6 years and subsequently became the firm's chief of staff for the Energy and Resources Industry Group seeing him play a lead advisory role in Uganda, Kenya, Tanzania, Mozambique, South Sudan, Somalia and Ethiopia.

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Prior to joining Cristal Advocates, he had worked as a Private Secretary to the President of the Republic of Uganda. During this time, he participated in several public and private sector engagements that included advising and coordinating activities relating to oil and gas as well as infrastructural projects of national significance. John had earlier worked with the Post Bank Uganda Limited and Shonubi Musoke and Co. Advocates.

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Dickens leads the oil and gas practice at Cristal Advocates. He has an in depth appreciation of Uganda's oil and gas sector having served as the maiden Company Secretary of the Uganda National Oil Company (UNOC) and the Uganda Refinery Holding Company Limited (URHC). UNOC represents the Government of Uganda commercial interests in the oil and gas sector while URHC represents government interests in the refinery project as well as managing the petrol based industrial park.

Dickens was instrumental in UNOC's formation and initial period of operation and also served as its head of Contracts, Negotiations and Advisory until May 2018. Prior to joining UNOC, Dickens was Legal Counsel at the Petroleum Directorate of the Ministry of Energy playing key legal advisory roles on the negotiation and implementation of PSAs, Joint venture and other oil and gas agreements. He was also part of the team that shepherded the process of enacting the current Ugandan oil and gas Legislations and Regulations including the local content requirements.

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