

**THE SHIFT FROM JOINT OPERATING AGREEMENTS TO PRODUCTION
SHARING CONTRACTS IN THE NIGERIAN OIL INDUSTRY: ANY BENEFITS
FOR THE PLAYERS?**

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ABSTRACT: The Oil and Gas industry is the mainstay of Nigeria's economy, accounting for over 95% of her foreign exchange earnings and 40% of her GDP. These operations are carried out mainly by Multinational Oil Companies, which operate under different contractual arrangements with the Nigerian National Petroleum Corporation (NNPC) on behalf of the Nigerian Government. At the beginning, Joint Operating Agreements were the major contractual arrangements in the industry, but recent trends have seen the emergence and prominence of Production Sharing Contracts. This paper examines the salient features of each of these arrangements in the oil industry in Nigeria, their strengths and drawbacks and provides insights into the apparent shift in emphasis from Joint Operating Agreements to Production Sharing Contracts in the Nigerian oil industry.

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TABLE OF ABBREVIATIONS

DPR	Department of Petroleum Resources
FID	Final Investment Decision
JOA	Joint Operating Agreement
MNOCs	Multi National Oil Companies
MOU	Memorandum of Understanding
NAPIMS	National Petroleum Investment & Management Services
NNPC	Nigerian National Petroleum Corporation
NOC	National Oil Company
OPEC	Organisation of Petroleum Exporting Countries
PSC	Production Sharing Contract
US	United States of America

1. INTRODUCTION

Oil and gas operations commenced in Nigeria effectively in 1956, with the first commercial find in that year by the then Shell D'Arcy. Before this time, almost the entire country was covered by a concession granted to the company to explore for petroleum resources since November 1938. This dominant role of Shell in the Nigerian oil industry continued for many years, until Nigeria's membership of the Organisation of Petroleum Exporting Countries (OPEC) in 1971, after which the country began to take a firmer control of its oil and gas resources, in line with the practice of other members of OPEC. This period witnessed the emergence of National Oil Companies (NOCs) across OPEC member countries, with the sole objective of monitoring the stake of the oil producing countries in the exploitation of the resource. Whereas in some OPEC member countries,

the NOCs took direct control of production operations, in Nigeria, the Multi-National Oil Companies (MNOCs) were allowed to continue with such operations under Joint Operating Agreements (JOA) which made clear provisions for the respective stakes of the companies and the Government of Nigeria in the ventures.¹

This period also witnessed the arrival on the scene of other MNOCs, like Gulf Oil and Texaco (now ChevronTexaco), Elf Petroleum (now Total), Mobil (now ExxonMobil), and Agip, in addition to Shell, which was already playing a dominant role in the industry. These other companies were also operating under JOAs with NNPC, with varying percentages of stakes in their respective acreages. To date, the above companies constitute the major players in Nigeria's oil industry, with Shell accounting for about 50% of Nigeria's daily production, currently standing at about 2.4 million barrels of oil per day. JOAs are also still dominant in the oil industry in Nigeria, accounting for over 90% of total oil and gas production in Nigeria today.

However, the emergence of offshore oil and gas operations and the granting of deep-water acreages to the oil producing companies, witnessed a shift from JOA regimes to Production Sharing Contracts (PSCs), with different implications for the operation and regulation of the oil industry in Nigeria. This shift is attributable to a number of factors, ranging from the complexity of operations in the offshore terrain, which makes regulation under a JOA more difficult, to dwindling resources of the country, which makes funding under the JOAs precarious for the government. At a time when the Nigerian government is intent on increasing oil and gas reserves and the country's production capacity without the necessary funds to back it up, a funding arrangement which achieves those objectives without having a negative impact on the scarce resources available for investment in other sectors of the economy is imperative. A number of oil and gas projects using the PSC model are due to come on stream soon, and the successes recorded so far in this area

¹ For a full account of the history of oil and gas operations in Nigeria and the dominant role of Shell, see http://www.shell.com/home/Framework?siteId=nigeria&FC2=/nigeria/html/iwgen/news_and_library/factfiles/zzz_lhn.html&FC3=/nigeria/html/iwgen/news_and_library/factfiles/impdashni_1705_1228.html last visited on 18th June 2005

have encouraged the government to consider extending PSC arrangements to other areas of the industry which had hitherto operated under JOAs.

This paper examines these contractual models in the Nigerian oil and gas industry, their respective strengths and drawbacks, and the current shift in emphasis from JOAs to PSCs, adducing reasons for this shift, and what this portends for investment in the sector in Nigeria. This study is important because, understanding the interplay of factors in this shift will help in the appreciation of its long term effects on the investment climate and the overall development of the Nigerian economy, in which oil and gas plays a central role.

2. THE JOA AND HOW IT OPERATES

Modelled after partnership agreements, the JOA operates as a form of partnership between the joint venture partners, where the participatory interest of each of the partners is spelt out in the JOA, which also designates one of the partners as the operator of the venture. In Nigeria, the NNPC represents the interest of the government in the joint ventures, whereas the respective MNOCs operate the different ventures with varying participatory interests, as specified in Figure 1 below:²

² Source: Overview of Nigeria's Oil Industry – Unpublished presentation slides by Shell Petroleum Development Company of Nigeria Limited dated October 2004.

Figure 1 – Nigerian JOA (Equity Interests of Major Partners)

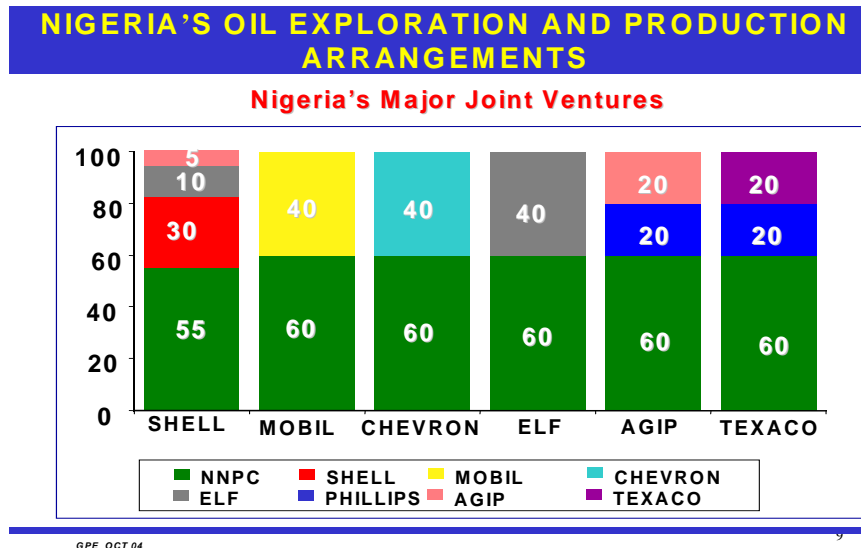


Figure 1 shows that the NNPC holds 60% in all the joint ventures except the venture operated by Shell, in which NNPC holds 55%. The JOA governs the relationship between the parties, including budget approval and supervision, crude oil lifting and sale in proportion to equity, and funding by the partners. In addition to the JOA, a Memorandum of Understanding (MOU) governs the manner in which revenues from the venture are allocated between the partners, including payment of taxes, royalties and industry margin.

At the beginning of each year, the Operator presents an operating budget to the joint venture partners for approval, based on the projection for running the venture for the year. Upon approval of the annual budget, the operator prepares a monthly cash call statement, which calls on all partners to provide their respective share of the funds required to run the venture for the month, in split currency of US Dollars and Nigerian Naira. If the cash call is overdue, the Operator is also empowered to borrow on behalf of the joint venture, charging the defaulter interest for the loan. However, if funds cannot be borrowed, the Operator has to scale down operations to fit within the funding available

from the partners.³ This drawback has been criticised as one of the shortcomings of JOAs, which makes it relatively unattractive, especially in an environment where all the partners do not possess equal funding capabilities.

The income derived from the operation is also shared in proportion of the equity interests of the parties to the venture, with each party bearing the cost of its royalty and tax obligations in the same proportion. Allocations are also made from the revenue to take care of operating and technical costs. Using the Shell operated joint venture as an illustration; the proportion in which the revenue from the venture is allocated is shown in Figure 2 below:⁴

Figure 2 – Revenue Splitting Formula (Shell Operated JV)

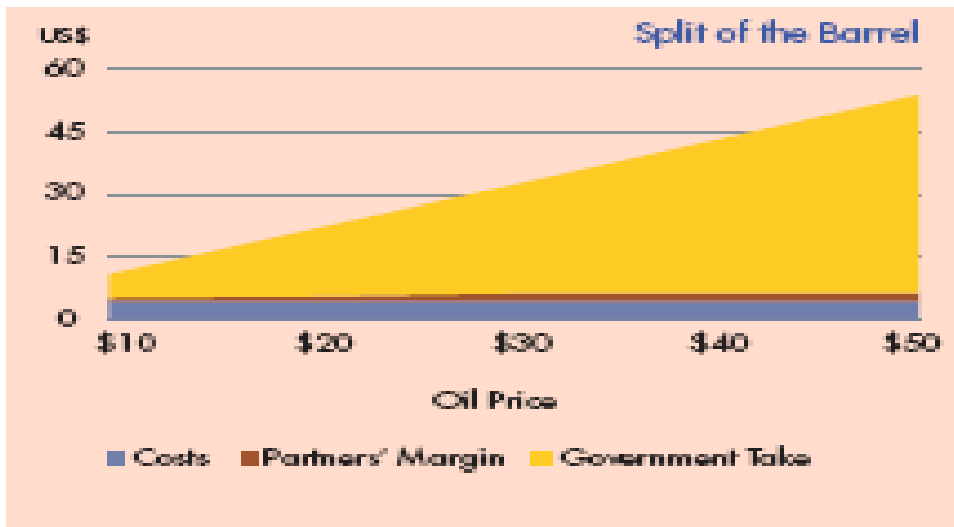


Figure 2 shows the split of the revenues from the joint venture barrel, using different pricing scenarios ranging from \$10.00 to \$50.00 per barrel, and demonstrates that the bulk of the revenue goes to the government, irrespective of the price of crude oil in the market. A fixed margin is allocated for technical costs, while a near fixed margin is also

³ Ibid.

⁴ Source – Shell Nigeria 2004 Annual People and Environment Report, available at http://www.shell.com/static/nigeria/downloads/pdfs/2004_rpt.pdf last visited on 18th June 2005

allocated to the Operator and other joint venture partners, whereas the government take in the venture increases as prices increase.

2.1. CHALLENGES OF THE JOA

Some of the constraints associated with the JOA have been identified as poor funding, due to the imbalance which often exists in the financial capacity of the different joint venture partners, especially the government which has other pressures on its resources, leading to reduction in operations and consequential loss in revenue. Others are allegations of gold plating of operating costs by the non-operators of the venture, which often leads to mutual suspicion between the parties, and the rather unfair distribution of revenues, especially in the situation of upsides from high oil prices as demonstrated in Figure 2.

In addition to the above, the Operator also faces peculiar challenges in Nigeria to the extent that it has to meet the cost of demands by oil producing communities for development programmes in their areas, leading to disruptions in operations from time to time. The cost of all these has to be accommodated within the fixed technical cost indicated in Figure 2, and this could put a lot of pressure on the operations, especially at times of high agitation by communities which is prevalent in Nigeria's Niger Delta.

With the expansion of the Nigerian oil and gas industry, acreages started being allocated in the shallow and deep offshore areas, and this necessitated a different regime, as it brought its own unique challenges in terms of funding and technical complexity. This led to the introduction of PSCs in the new offshore and inland basin acreages, which is gradually assuming prominence in the entire industry.

3. THE PSC AND HOW IT OPERATES

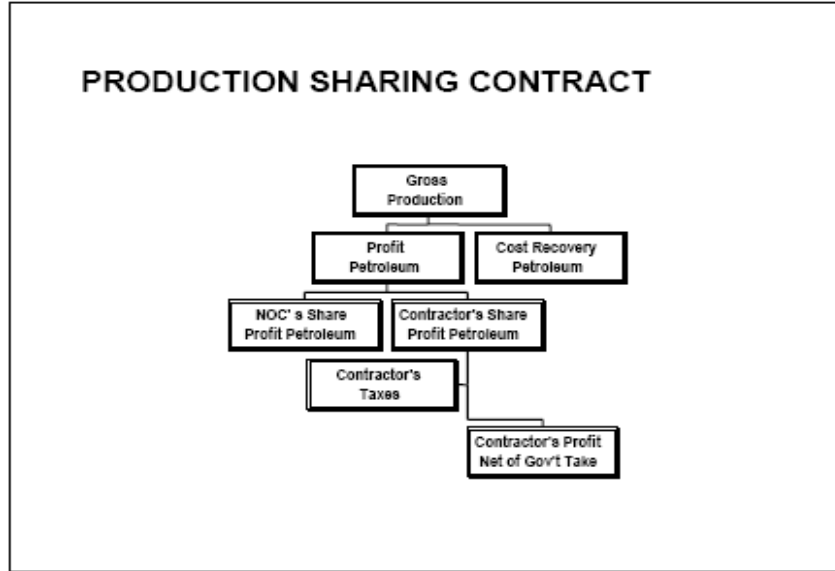
As the name implies, PSCs focus on the sharing of the output of oil and gas operations in agreed proportions between the Oil Company, as a contractor to the government, and the NOC as the representative of government interests in the venture. This form of contracts originated in Indonesia in 1966, and was modelled along the practice in the agricultural sector of share cropping, where the owner of the land grants a farmer the rights to grow crops on his land and shares the proceeds with the farmer in agreed proportions after the harvest.⁵

Under a PSC, the contractor, usually a foreign oil company bears the entire cost and risk of exploration activities, and only reaps the rewards after a commercial find. In the event of a commercial discovery, the contractor recovers its costs fully from allocation of oil, referred to as 'Cost Oil'. Allowance is also made from production for royalties, after which the remainder of the production, called 'Profit Oil', is shared in agreed proportions between the company and the government as represented by the NOC. The Oil Company thereafter pays income tax on its profits from the venture. The oil and all the installations remain the property of the host government throughout the duration of the contract. A graphic representation of the operation of a PSC is shown in Figure 3 below:⁶

⁵ See Binderman, K.: *Production Sharing Agreements: An Economic Analysis* (1999) p. 9-10.

⁶ Source: Lecture notes in International Business Law by Dr. Tim Martin, CEPMLP, Scotland, available at <https://my.dundee.ac.uk/bbcswebdav/users/rfleiper/IBT%203/7.%20Host%20Govt%20%26%20Joint%20Ventures/Host%20Govt%20Contracts%28April2005%29%20B%26W.pdf> last visited on 10th June 2005

Figure 3 – Typical Operation of PSC



In Nigeria, this form of contractual arrangement is relatively new, and covers mostly acreages in the shallow and deep offshore areas, and the inland basins. The major operators in Nigeria⁷ are still largely the holders of the PSCs, but there have also been new entrants, made up of independent foreign oil companies, which enter into partnerships with indigenous companies to bid for oil blocks, and thereafter operate it in line with predetermined contractual arrangements.⁸

In addition to the specific contracts signed with the individual companies, the main law which regulates the operation of PSCs in Nigeria is the Deep Offshore and Inland Basin Production Sharing Contracts Act No. 9, Laws of the Federation of Nigeria, 1999. This law sets out the general framework for the operation of PSCs, including the applicable royalties, tax regimes, and the manner in which costs and profits are allocated between the parties.⁹ It provides for payment of a flat rate of 50% tax on petroleum profits by

⁷ Namely Shell, ChevronTexaco, Total, ExxonMobil, and Agip

⁸ A number of such companies featured in the 2005 bidding round for 60 new acreages spread over the entire country.

⁹ The full text of this Act can be assessed at <http://www.nigeria-law.org/DeepOffshoreAndInlandBasinProductionSharingContractsDecree1999.htm> last visited on 14th June 2005

PSC operators, and sets different royalty regimes, depending on the water depth in which the operation is carried out, ranging from 12% for water depths from 200-500m, to 0% for water depths in excess of 1,000m. PSCs in inland basins attract a flat royalty of 10%.

In addition to royalties, taxes and its share of profit oil, the government also earns revenue from signature bonuses paid by the oil companies upon successful bids. Most forms of payments under PSCs operating in Nigeria are made in oil, as the law provides for cost oil, tax oil, royalty oil and profit oil. Investment Tax Credits and Allowances are also available to the investors at the rate of 50% of the value of such investments.¹⁰

Some of the advantages associated with PSCs have been identified as the relative flexibility in the management of the operations, and the fact that there is no financial burden on the host government, and even after a commercial find, the payment to the contractor is in oil, which does not attract any direct financial cost. Leveraging on the technical know-how and experience of the companies in such operations, the government can focus its energies in other areas of the economy, while trusting that the oil and gas industry will develop at an acceptable pace without the usual trappings of cash call constraints.

However, the drawbacks that have been identified are the risky nature of the operation. In the event of an unsuccessful operation, millions of dollars can just be lost, without any hope of recovery unless the local laws allow for costs from one acreage to be transferred to another, which is not always the case, and would depend on the provisions of the PSC entered into by the parties. Also, the fact that the contractor is usually allowed a relatively unfettered hand to draw up and execute its program leads to allegations of gold plating of costs.

The long term nature of transactions in the oil industry has however made it possible for the parties to surmount some of these difficulties, and strive to make room for flexibility

¹⁰ See Ibid, Sections 3-10.

in drawing up the terms, and also make provisions for renegotiation in the event that particular provisions are later found to be causing undue hardship.

4. SHIFT FROM JOAs TO PSCs IN THE NIGERIAN OIL AND GAS INDUSTRY

Even though PSCs are relatively new in the Nigerian oil and gas industry, it has assumed wide acceptance and is becoming the preferred contract structure in the industry. In fact, recent pronouncements by government officials and regulators in the industry suggest that there is now a deliberate effort to shift the contractual structure from JOAs to PSCs.¹¹ A number of reasons can be adduced for this apparent change in policy.

First, the fact that the geology of the Nigerian Niger Delta is now relatively well known as a prolific oil bearing basin makes it easier for investors in the sector to be comfortable in going it alone, even in the relatively high risk shallow and deep offshore basins. This provides the comfort that the chances of a commercial find are high, and therefore the investor stands a good chance of recouping its investment costs and making a healthy profit. The track record in this area has been good, and this has attracted a number of new companies to the country in recent bid rounds.

Secondly, the desire of the government to free up resources currently paid as its share of the joint venture costs and channel it to other areas of dire need in the economy has also made this contractual structure attractive. In 2004, the government funding to all the joint venture operations in Nigeria's oil industry stood at \$3.4 billion, while the projections for 2005 was \$4.4 billion.¹² In spite of this funding level, there have been perpetual complaints of under funding by the different Operators of the JOAs, leading to cutbacks in operations, with the attendant negative consequences for the Nigerian economy. In the face of rising challenges and demands by other sectors of the economy,

¹¹ See a report to this effect in Thisday Newspaper of 12th June, 2005 titled "Federal Government May Stop Cash Calls in 2006" available at www.thisdayonline.com

¹² See Shell Nigeria 2004 People and Environment Report, p. 2 available at http://www.shell.com/static/nigeria/downloads/pdfs/2004_rpt.pdf

it is considered that this shift will provide the government with the much needed funds to effectively tackle those other challenges, while ensuring that operations in the industry continue at full blast, in line with the work programs of the operators in the industry.

Thirdly, the record of effective regulation of operations in the industry has not been very good on the part of the government agencies charged with this responsibility. In Nigeria, the National Petroleum Investment and Management Services (NAPIMS) and the Department of Petroleum Resources (DPR), are ill equipped to effectively police the operations of the highly skilled and experienced operators in the industry, leading to endless allegations of underhand deals by the operators and mutual suspicion. It is expected that with the shift from JOAs to PSCs, the regular budget meetings will no longer be necessary, as there would be no more cash call requirements, and this would free up the resources of the regulatory bodies to develop the capacity required to monitor the interest of the government in a more effective manner.

Finally, the growth of the Nigerian oil industry should be assured through this shift, because the major oil companies and the new entrants have the required financial and technical capacity to run with their programmes unhindered by the many distractions attendant to JOA operations. Moreover, a healthy competition is expected to develop between the operators, who will see in the full control of their operations, an opportunity to increase their production base, and therefore their share of the Nigerian oil and gas market.

This shift would however throw up its own challenges, as the form of regulation and monitoring now required on the part of the government and its agencies will be more sophisticated and technical in nature. The fact that the cost outlay will be exclusively met by the oil companies may create room for allegations of gold plating, to enable them obtain more share of the Cost Oil than they would ordinarily be entitled to. Already, this trend is emerging with the pioneer Bonga project, operated under a PSC by Shell Nigeria

Exploration and Production Company Limited (SNEPCO) a subsidiary of Shell, where a Senate Committee recently summoned the company to explain the escalation of costs from the initially projected \$2.9 billion at the stage of the Final Investment Decision (FID), to the current cost estimate of \$3.816 billion.¹³

5. CONCLUSION

Nigeria's oil and gas industry appears set for the much-needed growth, especially at a time of consistently high oil prices which analysts have predicted will be sustained for a long period to come, in view of the rising demand across the world, especially from China. With this trend, the shift in contractual structure from JOAs to PSCs has the potential of opening up the industry to new players and creating the necessary environment for existing players to expand their operations without the hindrance hitherto posed by the JOA arrangements. This should also witness a huge influx of investments into the Nigerian economy, especially in the wake of recent fruitful discussions between the Nigerian government and the Paris Club of creditors on the treatment of its national debt burden, which should increase overall confidence in the Nigerian economy.

However, to fully realise this potential, the Nigerian government and the foreign oil companies must maintain the long-term view of their relationship and create win-win situations, which eschew mutual suspicion. The regulatory environment and the fiscal regimes should also be kept stable, to establish the required predictability which is so vital to sustained foreign investment.

¹³ See full report at Alexander's Gas & Oil Connections website at <http://www.gasandoil.com/goc/company/cna52187.htm> last visited on 18th June 2005

BIBLIOGRAPHY

1. PRIMARY SOURCES

National Legislation

Deep Offshore and Inland Basin Production Sharing Contracts Act No. 9,
Laws of the Federation of Nigeria, 1999.

2. SECONDARY SOURCES

2.1. Books

Bindemann, K., Production Sharing Agreements: An Economic Analysis
(Oxford, United Kingdom: Oxford Institute for Energy Studies, 1999)

Fox, W.F. Jr., International Commercial Agreements, 3rd Ed. (The Hague,
Netherlands: Kluwer Law International, 1998)

2.2 Articles

Umar, M.B., *Legal Issues in the Management of Nigeria's Production
Sharing Contracts from Nigerian National Petroleum Corporation's
Perspective* (OGEL Vo.3 – Issue 1, March 2005)

2.3 Others

2.3.1 Internet Sources

Alexander's Gas & Oil Connections website at
<http://www.gasandoil.com/goc/company/cna52187.htm> last visited on
18th June 2005

Lecture notes in International Business Law by Dr. Tim Martin available
at
<https://my.dundee.ac.uk/bbcswebdav/users/rfleiper/IBT%203/7.%20Host%20Govt%20%26%20Joint%20Ventures/Host%20Govt%20Contracts%208April2005%29%20B%26W.pdf> last visited on 10th June 2005

Overview of Nigeria's Oil Industry – Unpublished presentation slides by
Shell Petroleum Development Company of Nigeria Limited dated October
2004.

Shell Nigeria's Official Website at <http://www.shell.com/home/Framework?siteId=nigeria&FC2=/nigeria/html> last visited on 18th June 2005

Shell Nigeria 2004 Annual People and Environment Report, available at http://www.shell.com/static/nigeria/downloads/pdfs/2004_rpt.pdf last visited on 18th June 2005

Thisday Newspaper report of 12th June, 2005 titled "Federal Government May Stop Cash Calls in 2006" available at www.thisdayonline.com last visited on 15th June 2005