



State participation in joint ventures: folly or wisdom on the part of host states?

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Abstract

Petroleum and natural resources in states where they are found in quantum have always been viewed as having myriad significance. It was amongst the sectors that Lenin referred to as the 'commanding height' and one which must thus be controlled by the state. The government of such countries are usually caught between their desire to maximize the revenue from the exploitation of their hydrocarbon as well as effectively control its exploitation and attracting as well as sustaining the foreign investment in the sector. For most resource rich states, this control is exerted through direct state participation. This paper is an attempt at answering the question, is state participation really necessary and beneficial to host states?

Keywords: hydrocarbon, participation, beneficial

1. Introduction

When a resource rich state extracts its petroleum resources, its principal objective is to strike a balance between the optimal extraction of its resources for the benefits of its citizenry, and the need to attract foreign direct investment through international oil companies (IOCs) to recover those resources^[1]. The duty is on the host state rather than the individual companies which have obtained license to operate in the country, to coordinate the exploitation, exploration and production of the state's hydrocarbon resources in a way which ensures optimum recovery^[2]. Since a licensee without such guidance by the host state would as evidence has shown not optimally produce such field, doing so either at low cost or abandoning the field once its profitability is marginal^[3].

The means of controlling or coordinating these exploration exercises range from use of legislative framework, to state participation (external and internal). What is adapted by each resource rich state as its means of control differs depending on the circumstance of each case. Certain states prefer the use of legislative framework and others direct control through state participation. State participation as a means of control has its recommendations as well as drawbacks and this paper aims at understanding its use by states as well as inherent issues, which may arise as a direct consequence of such usage.

Chapter one introduces the work. Chapter two discusses the development of state participation as well as its advantages and disadvantages. Chapter three looks at an issue of high importance as long as state participation is concerned; the existence or otherwise of conflict of interest in the National Oil Company of a host state as a result of state participation,

owing to its dual role as policy maker and investor. This chapter is broken down into areas, which may be affected by the direct involvement of the state in the oil exploitation and exploration venture. The experience of countries, which have been or are involved in state participation, is drawn on in analyzing the conflict of interest existence or otherwise. Chapter four looks at the liability regime in the oil and gas industry and how having the state involved as an investor may change such regime. The work is concluded and recommendations' made in chapter five.

2. Development of State Participation

Traditionally, petroleum activities, which, has its origin with the grant of an oil license to Colonel Edwin Drake by the Pennsylvania Rock Oil Company of Titusville, USA in 1857, had no provisions for state participation. The state only got a negligible royalty. The agreements were weighted against the state with the state having a minimal share swapped for the award of petroleum claims over an immense acreage for a significant duration to the investor^[4]. This standing continued until a succession of actions transpired:

- a) A plethora of oil rich states in the Middle East and Africa were increasing becoming politically independent from the home state of the oil companies;
- b) The formation of the Organization of Petroleum Exporting Countries (OPEC)^[5] to level the bargaining powers of member states against the previously domineering power of oil companies^[6];
- c) The promulgation of the 1963 United Nations General Assembly Resolution on the permanent sovereignty of states over natural resources^[7];

¹ Hunter, T., *The Role of regulatory framework and state regulation in optimizing the extraction of petroleum resources; a study of Australia and Norway* available at www.elsevier.com/locate/exis

² Ibid

³ Arnesen, F., Ulf, H., Per Ha^okon, H., Knut, K., Nygard, D., 2007. *Energy law in Norway*. In: Martha, M.R., Catherine, R., Inigo Del, G., Anita, R. (Eds.), *Energy Law in Europe: National, EU and International Regulation*. 2nd ed. Oxford University Press, Oxford.

⁴ Ogunlade, A., How can Government best achieve its objectives for Petroleum development: Taxation or State Participation?

⁵ Resolution XVI Article 90 of 1968 adopted by OPEC called for modifications in the format of the existing contractual relations between the international oil companies and the member states of OPEC

⁶ Atseguwa L., *Oil and Gas in Nigeria* (Benin: New Era Publications, 2004) p.87

⁷ United Nations' General Assembly Declaration of Permanent sovereignty over Natural resources

- d) The growing universal trend on the need for states to get an acceptable just portion of proceeds from petroleum development and maintain control of their God given resource.

State participation means that the host country either directly or through its National Oil Company (NOC) holds an equity interest in the International Petroleum Agreement (IPA) as a co venturer along with the International Oil Companies (IOC), financing its proportionate share of the petroleum costs [8].

At present there are over one hundred NOCs, which have been established by oil rich states since the Yacimientos Petroliferos Fiscales (YPF) was established by Argentina in the 1920's [9]. These NOCs usually own the participating interests held by the state in the International Petroleum Agreements entered into with the IOCs. These NOCs at other times (increasingly so) operate and exploit fields by themselves to the exclusion of IOCs. The famous new seven sisters are the seven NOCs who replaced the original seven sisters (the IOCs) in their dominance in the international oil scene [10]. These NOCs are reported to own 85% of the world petroleum reserves (and a higher percentage in OPEC countries) and the balance held by the IOCs [11].

The table below shows the international listed subsidiaries of China's National Oil Company as an example of NOCs exploring and producing to the exclusion of the IOCs and internationally too [12].

Table 1

Listed Company	Parent Company	% owned by parent
Petrochina	CNPC	86.29
Sinopec Corp.	Sinopec	75.84
CNOOC Ltd	CNOOC	66.41

China is not alone but an example of the strength of these NOCs at present. Though the origin of the growth of state participation can be traced to the 1960's and 1970's when major oil exporters in Africa, Asia and Latin America, and some producers in Middle East forced participation in the concessions already held by the IOCs [13]. It was nevertheless in use before then. By the end of 1940, the Kuwaiti state was awarded a 15% participation interest in a concession held by Aminoil, which was a consortium of Western IOCs. In 1957, the National Iranian Oil Company (NIOC) and AGIP (the Italian national oil company) entered into a contract where they established a separate entity SIRIP [14] and each partner held a 50% of the share capital of SIRIP. SIRIP was the operator of the field and the state was carried [15] during the exploration period, and the IOC alone supplied the risk capital for exploration and was reimbursed only in event of a commercial discovery.

⁸ Duval, C., *et al*; International Petroleum Exploration and Exploitation Agreements: Legal, Economic and Policy Aspects (New York: Barrows Company Inc.) 2nd ed.

⁹ Supra, note 1

¹⁰ *Ibid*

¹¹ Supra, note 7

¹² Supra, note 8

¹³ Supra, note 10

¹⁴ This was a form of incorporated JV and the various forms in which these JV involving state participation is carried out shall e discussed later in the work.

¹⁵ This is one of the forms of state participation and is discussed in detail in the next paragraph.

2.1 Forms of state Participation

The following are the various forms of state participation:

2.1.1 Paid Up Equity on Concessional Terms

In this form of participation, the host country acquires equity on terms, which, are biased in favour of the host state than what would typically apply with a private partner – this implies below the market price level. The state is required to bear its share of future expenditures although he or may not pay up its quota of the exploration costs which accrued in the past and neither does it pay a premium for being excluded from the exploration stage and its associated risks [16].

2.1.2 Paid Up Equity on Commercial Terms

Here, the host state takes up equity on uniform terms, as would a private investor partaking in a joint venture. This could be by contributing pro rata to all exploration, development and operating expenditures, thereby been subjected to the same risks as would a private investor or by joining the project post exploration after paying a premium to the other members of the group who bore the risks and costs for the exploration stage [17].

2.1.3 Carried Interest with Repayment

Under this heading, the private partners usually borrow capital to the state for the purchase of its participation share, naturally with an interest rate and a priority obligation on the state for the repayment of the loan from the proceeds of production accruing to it minus operating costs. Thus the host state uses part of its future petroleum revenue to repay its participation cost. It receives its revenue only after the cost of participation, plus interest has been repaid to the private investors [18].

2.1.4 Tax Swapped for Equity

The host state may opt to exchange a tax take for an equity share, hence decreasing tax obligations for the private investor and enabling the state to have a participation interest. This is usually practicable where the tax legislation is governed per contract basis as against a general legislation since such modification may prove difficult under a general legislative framework [19].

2.1.5 Equity in Exchange for Non-Cash Contribution

Under this category, the host state takes up participation in exchange for delivering infrastructure or other project assets without additional costs in acknowledgment of a project at the risk and expense of the government or just in exchange for petroleum participation rights [20].

2.1.6 Free Equity

This category covers the acquisition by a host state of participation or equity in a petroleum venture, without any direct compensation to the private investor. This may sometimes be an agreement by parties as a means of discharging an outstanding obligation of the private

¹⁶ Ogunlade, A., How can Government best achieve its Objectives for petroleum Development? CEPMLP, University of Dundee

¹⁷ *Ibid*

¹⁸ Joint UNDP/ World Bank ESMAP Reports, Taxation and State Participation in Nigeria's Oil and Gas Sector (August 2004) p.41

¹⁹ Supra, note 15

²⁰ Supra, note 12

investor, at other times, it may be forced upon the private investors as a means of keeping their petroleum licence or agreement^[21].

There is often a misconception that participation agreements are a separate type of international petroleum agreement (IPA). A participation agreement is not an IPA; rather, it is a provision either as an annex or separately to an existing IPA which grants the HC the option or right to become a party in the rights and obligations of the underlying IPA signed with the IOCs in proportion to the participation interest in the venture held by the state.^[22]

2.2 Legal Options Available For State Participation

There are a variety of options available to a state party, which has opted to participate in its country exploration and exploitation activities to employ to achieve this initiative. Firstly, the joint venture between the host state and the IOC may take the form of an incorporated venture; i.e the national oil company (or any other body designated to hold state's equity in anticipation venture) and the IOC jointly incorporate a company to carry out the petroleum operations on their behalf. This was the route chosen by the National Iranian Oil Company and Agip in 1957 when they formed SIRIP as the vehicle of the joint venture (JV)^[23]. The second one entails the holding of the lease or concession agreement by a company capable of profit making under the law, such company owns the assets of the venture and sells the production^[24]. Such arrangement has been viewed as been unbeneficial to a developing oil producing nation, since it will not have exclusivity on quantity of crude produced or price of such productions or declaration of dividends^[25]. The last form of joint venture possible is the use of an unincorporated vehicle with the effect that each venturer owns its participating interest share of the production. The tax obligations and financial obligations of the parties are several^[26]. The Nigerian government through the NNPC in joint ventures usually take this form. However participation only starts during the production phase for the government or its agency^[27].

2.3 Advantages of state Participation

Advocates of state participation opine that it adequately and directly protects the state's interests in decision making during petroleum development activities. This is particularly relevant in view of the divergent interests of the private investor and the state. States also expect a higher stake and take from profitable projects through equity holding. Oil companies, usually multinationals, have vast skills and experience in petroleum development activities; the state therefore seeks to acquire such technological and managerial skills in the course of carrying out the activities with the private investor. The Local Content policy in many oil endowed countries is aimed at developing indigenous capacity^[28].

2.3.1 Nigeria

From the perspective of the Nigerian Petroleum Act, the following were the objectives cum advantages of venturing into host state participation^[29]:

- a) To satisfy the desire of the domestic involvement of the host state as their prerogative with the international oil companies in the possession of petroleum rights and in making decisions on vital issues which have a bearing in petroleum operations;
- b) Improved income to Government through profit-sharing and the sale of the Government share of crude oil produced from joint operations;
- c) Acquisition of required expertise, managerial and technical skills by the state-owned oil company, which participates in the operation;
- d) Domestic supply of host states petroleum requirements and its products;
- e) Acquiring an intimate understanding of the methods, techniques and patterns of petroleum operations necessary for an effectual government regulation of the industry; and
- f) Active role in the control of joint operations to ensure national orientation as much as possible.

2.3.2 Norway

- For the Norwegian states, one of their main objectives for engaging in state participation was the developing of a fully competitive domestic oil industry and that objective was achieved through the incorporation of Statoil in 1972 to carry out petroleum activities on Norway's continental Shelf as a fully registered company^[30]. By 1973 it was Norway's appointed vehicle for state participation in petroleum ventures^[31].
- Another paramount reason for the establishment of Statoil and invariably introduction of state participation in Norway was to enable the state garner expertise in the oil and gas industry^[32]. Originally, Statoil performed a key role in helping the Norwegian State to achieve its expertise objective in the oil and gas industry as well as increase the government knowledge of petroleum exploration and production^[33]. With improved understanding and competence in both Statoil and the Ministry Of Petroleum and Energy(MOPE), the State utilized Statoil's participation in petroleum undertakings on the Norwegian Continental Shelf (NCS) to exert State control in the petroleum sector. This comprised power over the rate of production and the price of petroleum^[34]. This control was feasible since Statoil, as a 100% State-owned Oil Company, was included as a participant within the petroleum industry, thus facilitating the ability of the state to exercise regulatory role over the industry from a vantage position of being within it.

²¹ Ibid

²² Ibid

²³ Ibid

²⁴ Edu, K.O., A socio - legal appraisal of Nigeria's joint Venture Arrangement in the Petroleum Industry; Sri Lanka Journal of International law (2010) 22 (No.1)

²⁵ Ibid

²⁶ Ibid

²⁷ Ibid

²⁸ Ibid

²⁹ Paragraph 35, Article 1 of the Nigerian Petroleum Act, cap p.10, Laws of the Federation of Nigeria (LFN) 2004

³⁰ Lerøen, B.V., 2002. *Drops of Black Gold: Statoil 1972–2002*. Statoil, Stavanger.

³¹ Dam, K., 1976. *Oil Resources: Who Gets What How?* Available at www.sciencedirect.com

³² Ministry of Petroleum and Energy, 2006b. Statoil ASA (in Norwegian). http://www.regjeringen.no/nb/dep/oed/tema/statlig_engasjement_i_petroleums_virk_somh/statoil-asa.html?id=444383 (accessed 04.07.15).

³³ Ibid

³⁴ Supra note 5 @p.63

- The participation of Statoil was a means for the Norwegian government to acquire information, expertise and competence from the IOCs. This was achievable through the compulsory inclusion of Statoil in all awarded licenses. The grant of a 50% participating interest to Statoil in all licenses in the third round^[35], there was also advantageous voting rules in the prerequisite Joint Operating Agreement (Norway) as a condition of the award of the license. All the above, placed Statoil in a strong position in the decision-making process^[36].
- Participating in the petroleum activities and being regulated by the JOA alongside other members of the JV became a foundation for discussion between the IOCs and the Norwegian State, thus facilitating a myriad of advantages to ensue to the State. *The State's level of competence is advanced, since its position in the JOA makes it privy to a myriad of information about the petroleum field it would otherwise not have access to^[37].
- The joint participation of the state and the IOCs in the commercial sides of petroleum activities provided the State an avenue to express and realize its socioeconomic targets. This allows the State to balance the interests of all parties and thus fashion a regulatory arrangement agreeable to both parties (IOC and HC). This correlation amongst parties through the JOA is an essential feature of Norwegian system, since it expedites a balance of commercial and socio-economic considerations, and allows both parties to collaborate to realize their objectives^[38].
- The ability of the Norwegian State to control all facets of petroleum activities has encouraged optimum extraction of petroleum resources in Norway. The Norwegian state understands the need to attract and maintain foreign investments by IOCs particularly in its mature provinces. Through the JOA it creates a relationship with members, and enhances petroleum extraction by controlling the activities of those members through the management committee.

The Norwegian legal framework has evident capability to trigger optimum extraction of petroleum resources. The JOA has been played a dual role for the Norwegian state; as an instrument of regulation and as a member of the JV to make international oil companies to function within a framework that enables the State to achieve its aim of realizing the optimal value for the Norwegian society^[39] whilst allowing the IOCs to make the most of their investment from the Norwegian Continental Shelf^[40]. Another great benefit of state participation not envisaged by either the Nigerian petroleum law or Norway in its objectives of state participation is the direct access to the

world market by the host state^[41]. The host state through state participation through its entitlement to the share of production at the same rate available to the IOC. The host state through this means enters the world market and establishes with time profitable channels for the sale of its accruing share of production. It also benefits from a direct knowledge of the accurate market conditions and more ways of influencing it particularly with regard to the price of crude oil^[42]. Been privy to the true conditions of the international oil market *also* means the state gets a direct and instant profit accruing from rises in oil prices rather as against what would obtain if it wasn't directly a participant where it would have to wait for probably years of such increase before it can through taxation or renegotiation of terms benefit from such rise in price.

2.4 Drawbacks

One of the greatest drawbacks of state participation for the host state is an outflow of its direct access to the world oil market. The same manner in which it's been privy to the happenstances of the market earns it extra and instant profit. On the downside, the presence of the host state in the oil ventures leaves it vulnerable to any downward movement of the oil prices. Rather than being protected by the IOCs who would be hit by the effect of such low oil prices, were the state working with a PSA or concession, it gets hit directly by such downward slide of prices in cases of state participation.

Another major burden of state participation is the vulnerability of the state to operational risks inherent in petroleum exploitation. In the event of an exploration that is unattractive to government or unsuccessful, government bears a risk of loss, delay, variability and unpredictability in revenue in the proportion of its participating share in the venture^[43]. States have other priority obligations to its citizens who might be negatively affected by it's 'intermeddling' with a high capital, high-risk venture like petroleum.

A corollary to the above is the state's financial obligation via cash calls, which puts a lot of pressure on government's purse. The situation is worsened in the event of a default, whereby private investor has to borrow, at unusually high interest rates in order to keep the project going. The repayment of these loans plus interest could be crippling for the state, while simultaneously damaging the country's balance of payments position, as the loans have to be remitted in foreign exchange^[44].

State participation could negatively affect investor's decision to undertake petroleum development, thus impacting aggregate production volumes, investor's commercial efficiency and government's net revenue. It reduces the quantum of bookable reserves for the private investor^[45].

³⁵ Arnesen, F., Ulf, H., Per Haakon, H., Knut, K., Nygard, D., 2007. Energy law in Norway. In: Martha, M.R., Catherine, R., Inigo Del, G., Anita, R. (Eds.), *Energy Law in Europe: National, EU and International Regulation*. 2nd ed. Oxford University Press, Oxford.

³⁶ *ibid*

³⁷ For example through the work programme, field development plan, and reporting requirements under s12-17 of the Joint Operating Agreement (Norway).

³⁸ *Supra* note 26 @890

³⁹ Norwegian Petroleum Directorate, 2008b. Fact Pages: Ekofisk. <http://www.npd.no/engelsk/cwi/pbl/en/index.htm> (accessed 21.07.15).

⁴⁰ *Ibid*

⁴¹ Zakariya, H.S, *New Directions in the Search for and Development of Petroleum Resources in the Developing Countries*; Vanderbilt Journal of Transnational Law, Vol. 9, no 545

⁴² *Ibid*

⁴³ *Supra*, note 2

⁴⁴ Zakariya, S., *New Directions in the Search for and Development of Petroleum Resources in the Developing Countries*; Vanderbilt Journal of Transnational Law, Vol. 9

⁴⁵ *Ibid*

The state machinery controls the regulatory apparatus for petroleum activities. Political considerations are key to government decision-making and managerial appointments. However, private investors take business decisions based on commercial realities, expertise management and perceived policy stability. This brings forward a major conflict of interest with the state as an equity shareholder, a regulator and a political administrator^[46].

In view of the state's participation, a neutral regulatory body with adequate funding and personnel would need to be created in order to ensure transparency and probity in the discharge of its functions. This is another challenge for the state.

3. Host State Participation and Conflict Of Interest

Host countries grant IOCs access to petroleum exploration and exploitation activities within their territories principally for the purpose of attracting risk capital and appropriate technology, two factors which are indispensable in the searching for, boring for and producing hydro carbons. The HC also wants to ensure enduring benefits to the nation such as an optimum use of the petroleum resources, the development of the national economy, increased infrastructure, improved technical, social level of the country and its people^[47].

The IOCs on the other hand have legitimate interest and concerns in taking up risky venture of petroleum exploration and production, which must be taken into cognizance. These include but are not limited to the need to generate risk capital from profitable ventures to compensate for losses elsewhere and to enable them to pursue new ventures. Need for suitable rates of return in remittable currencies as well as an environment, which is stable and conducive for private investment^[48].

One frequently reoccurring concern where a HC is involved in the search for, boring and production of petroleum through state participation as equity participants with IOCs in JVs is that of a conflict of interest between the state public policy persona and its commercial entity persona. There have been divergent opinions as to whether indeed the state can be both a regulator of the industry as well as one of the players being regulated. In order to pitch tent with any of the academic debaters, we shall examine the various clauses, which are usually used in an IPA to achieve the objectives of both parties, HC and IOCs and examine whether or not HC or its NOC being in the clause changes the equation or balance in any way.

3.1 Acreage Allocation

In considering acreage allocation and the existence or absence of conflict in the dual role of HC as participant and regulator, the examples of many countries, which are or were involved in state participation shall be heavily drawn on starting with Norway, Denmark, Colombia, Indonesia, UK, and Nigeria.

3.1.1 Norway

Pursuant to the provision of the Royal Decree of December 8, 1972, the minister of petroleum and energy was authorised to issue a production licence, jointly to the Norwegian oil

company and an IOC or group of IOCs thus imposing state participation^[49]. The licence granted its holders an exclusive right to search for, bore for and produce petroleum over licensed area. The licensees were then required by the HC to execute a petroleum exploration and production agreement over licensed area amongst parties, in essence a joint operating agreement. The JOA contained inter alia the percentage interest of the parties with Statoil having 50% and 51% upon declaration of a commercial discovery. Statoil like all other parties was to contribute to the development and production costs^[50]. The HC party (Statoil was favoured in terms of acreage allocation since it was awarded acreage it did not bid for). That favouritism did not however translate to a conflict of interest since the HC party been in the license didn't change the conditions of acreage allocation.

3.1.2 Denmark

In Denmark, a separate entity was created solely for the purpose of holding Denmark's PI of state participation, *the Danish North Sea Fund* which was separate from the Danish Oil Company (DONG). Denmark like the pre 1985 Norway, had a mandatory 20% participating interest in any new exploration and production license been awarded. The DONG may opt to hold a separate participating interest in any block as any other private company. This state participation is effective from exploration stage^[51]. The co licensees were subject to a JOA entered into 90days within award of license, subject to the approval of the Danish Energy Authority, which is the government body responsible for managing the Exploration and Production (E&P) licenses^[52].

The use of a separate body for the approval of the JOA is in the authors' opinion a clever way to eliminate the argument as to whether or not there is a conflict of interest here.

3.1.3 United Kingdom

In 1976 following the announcement of the fifth licensing rounds involving 71 blocks, the state added an additional condition for its award of licenses that the successful applicants would enter into arrangements involving a state corporation (BNOC or BGC) as a 51% equity partner in the license^[53]. The JOA negotiated by the parties was subject to the approval of the Department of Energy. In the sixth round, improved conditions were introduced for the state corporation; option of being carries option of taking more than 51%, option for BNOC to put its oil to its partners or take theirs at the market price. The preparedness of parties to offer these options became an informal allocation criterion^[54].

For Seaward production licenses, BNOC and BGC were exempted from the normal rule of applying for a license only upon invitation allowed by the Petroleum (Production) Regulation 1976 to seek a license for an unallocated block at any time^[55].

⁴⁹ The situation has since changed since 1985, state participation is no longer imposed and all parties who bid for acreage are treated equally whether it is Statoil, SDFI or any other IOC.

⁵⁰ Supra, note 36

⁵¹ Carried interest during exploration was abolished in 2004

⁵² Supra, note 1

⁵³ Daintith, T., *Manual of United Kingdom Oil and Gas Law*, (London; Sweet and Maxwell) p.42

⁵⁴ London Gazette, August 8, 1978 pp 9507-10

⁵⁵ S.I. 1976 No.1129, reg(6)

⁴⁶ Ibid

⁴⁷ Supra, note 10

⁴⁸ Ibid

3.1.4 Nigeria

Paragraph 35, schedule 1 of the Nigerian Petroleum Act ^[56] provides for the Minister of petroleum Resources where he considers it in the public interest, to impose state participation as one of the terms of the award of a lease or license ^[57]. The terms of the venture participation were to be negotiated between the petroleum minister and the applicant of the licence or lease.

In April 1971, the Nigerian government took advantage of a participation option present in a 1962 concession with the Agip Oil Company and took 33% equity interest in the company. Soon thereafter, it also acquired 35% in the operations of Saffrap (currently ELF) ^[58]. 35% interest was also acquired in the operations of Shell B.P Petroleum Development Company of Nigeria Ltd, Mobil Producing Nigeria and Gulf Oil Company (currently Chevron Nigeria Ltd). By July 1979, following protracted negotiations with the MNCs, government participation increased to 60% in the interest of the MNCs with the exception of shell B.P Petroleum Development Company of Nigeria Ltd in which NNPC owned 80% participation interest from August 1, 1979 ^[59].

Although the government acquired participating interests in basically all the MNCs operating in its shores, it did not change the terms of the licence or concession in order to favour the MNC and short change the nationals. In essence the issue of conflict does not exist here since the NNPC was the government party in the participation ventures and the ministry of petroleum regulated the sector.

3.2 Right to Build and Operate Pipelines

One of the contents of the development plan which is considered highly important in the petroleum operations authorized by the IPA is the installation of flow lines and gathering lines to the delivery point. There are however situations when it becomes contingent that pipelines and other facilities for the transportation of the produced petroleum go beyond the field delivery point to reach a market or coastal port of export, this is usually in situations where there are no pipelines beyond the field or the existing ones do not have sufficient capacity. The IPA will provide for the right of the licensee(s) to apply for and obtain pipeline permit or license for the pipeline construction ^[60].

Although the export pipeline is often a separate project, it is nevertheless related to the field development itself. Often times where there are no existing pipelines, the licensees are persuaded to build one and operate for a tariff. The tariffs paid by third parties using the facilities directly built by the IPA holder are treated as revenue to the IPA holder. Under PSAs, they are treated as revenue for the purpose of cost recovery.

In producing regions like the North Sea or North America where there are already several pipelines in existence, access to the existing pipelines and processing facilities with sufficient capacity at a reasonable and fair tariffs is an issue of utmost importance for encouraging further exploration in the vicinity of those pipelines. Most IPAs or host country legislation impose an obligation that pipelines provide for third party access (TPA). The regulation of pipeline access

by the HC prevents the construction of additional pipelines or facilities where there is enough available capacity in existing pipelines and thus maximizes the cost of construction and maximizes HC revenues for sale of production ^[61].

Regulating the pipelines whether its construction or applying for permit or TPA tariffs is usually subject to the approval of the HC. It is the opinion of the author that the position of the HC(in or outside the license) does not change the outcome of these regulations one way or the other. In essence, the HC or its NOC or any other representative of the HC in event of state participation is not a position of conflict as long as pipeline operations and regulations' are concerned.

3.3 Work Programs

Most modern IPA's provide for a mandatory work program usually termed 'minimum work obligation' (MWO) defined for each period, in order to ensure a prompt and thorough exploration program. The program is usually stipulated in terms of either a minimum amount of expenditure or the performance of a specified units of work(such as a set number of kilometres of 2D seismic lines or square kilometres of 3D seismic surveys , or a specific number of exploratory wells drilled to a minimum depth). Sometimes the MWO contains both kinds of obligation i.e. in terms of minimum expenditure as well as minimum work units ^[62]. Examples of both kinds of MWO are shown below.

- a) Seismic surveys of a minimum of 3,00km and seismic re-interpretation;
- b) The drilling of at least two (2) exploratory wells for diligent petroleum search;
- c) Complete chemical studies of the fluids from the exploration wells drilled with sufficient depth to insure 500feet penetration ^[63].

The amount to be spent by the contractor in conducting exploratory operations...during the first six years ...shall be in the aggregate of not less than the amounts specified for each year of the six year:

- a) \$2.5 million during the first contract year;
- b) \$4 million during the second contract year ^[64];

Alternatively, an IPA may provide for a specific amount of expenditures but permit a designated well obligation to fulfil that monetary obligation without regard to cost. For example

Contractor must invest a minimum of U.S. \$15,000,000 in the first three years of the exploratory period. With the consent of the HC, the minimum investment requirement will include the cost of any petroleum operations performed contractor including...

Notwithstanding the above provisions, it is agreed that if the contractor has drilled at least two wells on the contract area during the first three years of the contract, the contractor shall be deemed to have fulfilled the minimum investment obligations, regardless of the actual amounts spent by the contractor.

⁵⁶ Cap p.10 laws of the Federation of Nigeria (LFN) 2004

⁵⁷ Supra, note 23

⁵⁸ Ibid

⁵⁹ Ibid

⁶⁰ Supra, note 7

⁶¹ Ibid

⁶² Ibid

⁶³ A MWO in terms of units of work

⁶⁴ A MWO in terms of minimum amount of expenditure

The approach of each HC to the minimum work obligation in its IPA differs greatly depending on a number of factors, geology, economic consideration, political stability and other risk factors. A comparison of various HCs contractual provisions on MWO show a range of work obligation, from requirement to drill a single well and spend \$3 million within two years, to the obligation to drill nine wells and spend a \$100 million within six years ^[65]. In an Indonesian PSA entered into in the 1980's, the IOC agreed to spend \$68,800,000 over a six-year period on a 6.4 million acre block offshore Lombok. In 21st Century IPAs the exploratory work commitment may run over \$100, 000, 000 million.

With regards to whether or not there is a conflict between the public interest protection cum regulator and commercial agent role of the HC involved in state participation as it pertains to work obligations, the following statement by Claude Duval *et al* is considered helpful by the author.

“During the exploratory period, the interests of the HC and IOC are generally compatible. The mutual goal is a prompt, thorough and successful exploratory program aimed at establishing a commercial discovery and ultimately, at assisting the HC in determining its petroleum resources ^[66].”

The authors continue by saying that the parties may have divergent views in particular settings, like one may prefer the drilling of one prospect over another or to test a new area within the exploration area as soon as possible and so on. But ultimately, no conflict arises with regards to MWO as to the public interest and commercial role of a HC as it pertains to state participation.

3.4 Enhanced Recovery Methods and Gas Flaring

Most oil producing developing states, have come to the realization that the more significant benefit can accrue to the state through the enhanced recovery of oil and gas and ultimately increase the recovery of petroleum beyond the easy oil. Use of measures such as injection of oil or gas into the reservoir or advanced machinery to force additional oil up the well may often be necessary to increase recovery ^[67]. Conflict may arise with regard to the methods between the IOC and the HC. The IOC may prefer to flare or sell associated gas from the field rather than re inject into the reservoir since they may consider this more expensive. Since the increased recovery may not be of a quantity to be considered profitable by the IOC.

A number of IPAs drafted in recent years contain provisions on gas flaring and enhanced recovery methods (though usually not very detailed). For most countries, there is a prohibition on flaring of natural gas without the authorization of the NOC/HC(whoever regulates) first sought and obtained. The Indonesian model PSA from 1970/1980 had a section on natural gas, which read thus:

“Any natural gas produced from the contract area to the extent not used in petroleum operations hereunder, maybe flared if the processing and utilization thereof is not

economical’ Such flaring shall be permitted to the extent that gas is not required to effectuate the maximum economic recovery of petroleum by secondary recovery operations including repressuring and recycling ^[68].”

For the Vietnam 1990 and eventually 2000 PSA, the provision on natural gas and flaring reads:

The natural gas discovered or produced during execution of the contract may be used to facilitate or enhance oil production or maintain field pressure, treated so as to extract light hydrocarbons, valued as commercial gas under the provisions hereof, or flared in the absence of cost effective solutions or in case of emergency or for well maintenance or appraisal in accordance with accepted international practices ^[69].

For the East Timor and Australia (now Timor-Leste) 2004 model PSA, it took a different direction with natural gas provision, it provided for gas retention in event of discovery of natural gas, not enough to be commercially produced but with such potential.

If the appraisal of a discovery of non associated gas demonstrates that the discovery, although substantial, is not then , either alone or in combination with other discoveries, commercially viable but is likely to become so within five(5)years, the ministry may, at the request of the contractors, declare a Gas Retention Area in respect of it for that period ^[70].

For most of the IPAs, a provision like the one below was considered sufficient to cover enhanced recovery operations:

The contractor agrees to observe in the conduct of production operations all the international rules and customs of the petroleum industry, which make it possible to ensure maximum economic recovery of the hydrocarbons.

The contractor agrees to proceed as soon as it is technically possible with the secondary recovery studies, and to utilize such processes if in the opinion of the government and the contractor, they can lead to a significant improvement in the recovery rate in economical conditions.

One factor which is obvious from looking at the natural gas provision on flaring and the reason for prohibition of flaring or its reduction to the barest level possible, is that the reason behind it is to safeguard human health and the environment and invariably both the IOC and the HC are agreed on this point that the protection of life and environment is important. The presence of the HC in the JV as a participant does not conflict with its otherwise position on gas flaring and recovery methods, instead it would push for stricter enforcement of the regulations on gas flaring and enhanced recovery methods.

⁶⁸ Section VI, Article 6.2 of the Indonesian PSA, 1970 (later amended in 1980)

⁶⁹ Article 16 of the Vietnam PSA 1990(amended in 2007)

⁷⁰ Article 3.5 2004 East Timor and Australia Model PSA under the Timor Sea Treaty of 2002 between Australia and East Timor

⁶⁵ Supra note 7@189

⁶⁶ Supra note 7@129

⁶⁷ Ibid

3.5 Regulation by host state

In considering the regulation of oil and gas explorations, and the sector generally, and the existence or otherwise of conflict between the government regulatory or public interest protection role and its commercial role. Again we resort to what the practice was/is in resource rich countries which were/are also involved in state participation. We examine the practice in the United Kingdom, Columbia, Norway and Algeria.

3.5.1 United Kingdom

While the 1974 white paper had the BNOC described as a mechanism for holding state participation in licenses, the body established by the Petroleum and Submarines Act 1975 on January 1, 1976 had considerably wider powers^[71]. The act created a statutory public corporation with wide objects and powers, enabling it to enter into all activities carried on by the international oil companies.

In addition, full use was being made of BNOC's statutory power to provide advice to the minister, common form in public corporation but of great sensitivity in a situation in which the adviser was also co-participant with, and competitor of, the licensees on whose treatment advice might be sought^[72]. For instance in arrangements for participation in respect of first to fourth round licenses, specific provision was made for BNOC to participate as adviser in consultations with the licensee and secretary of state for energy under the consultation arrangement which form part of the participation agreement^[73].

That clearly is conflict between the role of the state as a regulator/ public interest protector and its commercial interest holder/investor role. This clearly is a violation of the natural justice maxim, '*nemo iudex in causa sua*' being a judge in one's case. The conservative government which came into office in 1979, realising this existence of conflicting roles and also in a bid to privatise BNOC, the government in 1982, adopted a policy that BNOC retain its trading function and hence its acquisition rights under participation agreements, along with certain agency functions, its oil exploration and production interests was however resolved to be transferred to a new company, Britoil plc; in which the government would maintain at least a minority interest^[74].

3.5.2 Norway

When Statoil was first established, it was given a favored status in the sector. The 50 percent interest, which it had at, first, was increased to a 51 percent majority upon declaration of commercial discovery and it also had a carried status during exploration phases^[75]. The institutional structure of the sector was very clear. The sector ministry was in charge of policy, reporting to the Storting or Parliament; the Norwegian Petroleum Directorate was established to provide technical and regulatory oversight, while Statoil occupied itself with commercial operations^[76].

- Petoro, which is a management company, founded by

the state, holds licenses on behalf of the Norwegian State in licenses. It also manages the commercial aspect of in relation to the SDFI interest^[77]. However, Petoro is however not a shareholder of the SDFI. The shares of SDFI are instead held by the state. Petoro as a member of the Joint operating agreements are entitled to the same rights and obligations as all other members' of the JV who hold the license. As they are party to the same terms as the other participants in the JOA, the Norwegian State takes its portion of income equivalent to its percentage interest in the field, and is represented on the management committee as prescribed under article 1 of the JOA^[78]. As a 100% State-owned entity, Petoro continues to enable the Norwegian government to regulate petroleum activities, since it is a member of the management committee in all fields where Petoro is a licensee. This currently includes 120 production licenses on the Norwegian Continental Shelf^[79] and includes control over 33% of Norway's petroleum resources and 25% of aggregate Norwegian oil and gas production^[80].

3.5.3 Algeria

Until the enactment of the Algerian Hydrocarbons Law of April 28, 2005, as amended in 2006, Sonatrach, the Algerian national oil company, was both the regulatory and the obligatory majority partner under a production sharing contract. Following the promulgation of the law, a new agency, the Agence nationale pour la Valorization des Ressources en Hydrocarbon (the National agency for the Valorization of Hydrocarbon Resources (ALNAFT)), became the supervisory body, with Sonatrach acting as Algeria's NOC. IOCs are required to enter into a partnership with Sonatrach, which has a 51% participation interest in event of a commercial discovery^[81].

3.5.4 Colombia

The reversion to the state in 1951 of the "De Mares" oil concession agreement, which had hitherto been awarded to foreign investors in 1921, signified an important milestone in the Colombian oil and gas history. With the reversion came the incorporation of the Colombian NOC, "*Empresa Colombiana de Petroles*"- Ecopetrol. S.A. established principally for the purpose of holding that concession^[82]. With the establishment of Ecopetrol, the Colombian state ventured into the oil and gas industry which prior to 1951 had been the exclusive domain of foreign companies owing to government's policy, high costs and technical complexity which is the feature of the industry^[83]. A significant role of Ecopetrol and of concern to us is the dual role it held from its incorporation until 2003 as administrator and regulator of petroleum operations and that of investor, holding the

⁷¹ Supra, note 46 @p.44

⁷² Ibid

⁷³ S.3(3) of the Of the Petroleum and Submarine Pipelines Act 1975, repealed by the Oil and Gas (Enterprise) Act 1982, Schedule 4

⁷⁴ Note 55 Supra @p.47

⁷⁵ Supra, note 2

⁷⁶ Ibid

⁷⁷ Ministry of Petroleum and Energy, 2006a. Norwegian Oil History in Brief.

<http://www.regjeringen.no/upload/kilde/oed/bro/2004/0006/ddd/pdfv/204702-fact-sog0104.pdf>(accessed 14.07.15).

⁷⁸ Ibid

⁷⁹ Norwegian Petroleum Directorate, 2011. Facts 2011. <http://www.npd.no/en/Publications/Facts/Facts-2011/> (accessed 14.07.15)

⁸⁰ Ibid

⁸¹ Supra, note 7 @p.195

⁸² Farjado, D., *The Restructuring of the Colombian National Oil Company "Ecopetrol"- The Transformation of the Colombian Oil Industry*,

⁸³ Chona, F. "*El Petróleo en Colombia*". Revista del centro de Estudios Colombianos, No. 44 (March), pg 89-101. (1987)

participating interests in the field where the Colombian state had equity^[84].

With respect to the dual role of the Colombian NOC, Ecopetrol, first as a state company and secondly as a commercial entity was clear in two respects Ianovich^[85] asserts: First in exploration, since Ecopetrol determined the terms of exploration for its co investors, and at the same time assigned exploration area to itself which was free from the conditions which would apply to third parties; secondly, in the fuel market, the Colombian Ministry for Mines and Energy(MME) which regulated prices and tariffs of fuels, was also the president of Ecopetrol's board of directors and as such the new regulation for private participation in the sector didn't apply to Ecopetrol^[86].

In 2003, following some concerns^[87] (one of which was the potential for a conflict of interest from the dual role status of Ecopetrol) about the Colombian oil and gas industry, the dual roles was split. Following the enactment of decree 1760 of 2003, (i) the Colombian National Agency for Hydrocarbon (ANH) was created as the designated body in control of the administration and regulation of the oil and gas sector (ii) Ecopetrol's was transformed into a fully commercial entity with the sole focus of participating in the Colombian oil and gas sector (upstream and downstream) and internationally, just like any other IOC^[88].

Clearly, the state of the Colombian NOC prior to 2003 was one with a conflicting interest, seeing as it acted, both as the regulator and regulated. Furthermore, its controlling board which controlled some sector of the industry was still in the position of conflict, making rules which governed third parties and its own, with the situation been that as Ianovich^[89] pointed out, the rules made for participants in the oil and gas industry oftentimes did not apply to Ecopetrol.

4. State Participation and Liability

The business of exploring for, producing, transporting and processing hydrocarbons are fraught with a wide array of risks: to human lives and well being, property, environment and even the valuable hydrocarbon itself^[90]. A number of contractual devices/practices have been put in place over the years by the oil and gas industry to enable it caters for these physical risks. These practices barring certain exceptions, seek to at least as far as the parties to the contract are concerned radically depart from the common law position on allocation of risks^[91]. The three primary means of achieving this are indemnity and hold harmless clauses; clauses, which exclude or limit liability for 'consequential losses' and cap or overall limitations on liability. We proceed to look at the various means in relation to state participation.

⁸⁴ Supra, note 7 @p.112

⁸⁵ Ianovich cited in Farjado, D., supra

⁸⁶ Ibid

⁸⁷ i. The Ecopetrol's competence as operator when compared with other IOCs which were in operation in other fields in Colombia

ii. The conflict of interest which rose from the dual role of Ecopetrol as regulator and investor

iii. There was a desire to for an increased production output and reserves.

⁸⁸ Supra, note 63

⁸⁹ Supra, note 66

⁹⁰ Gordon, G. *et al*; Oil and Gas Law- Current Practice and Emerging Trends (Dundee, Dundee University Press) 2nd ed. P.443

⁹¹ Ibid

4.1 Risk Allocation

The distribution of risk by parties to a contract effected through the use of indemnity and hold harmless clauses are not isolated events. They happen against the backdrop of the principles in law of contract and tort/delict on the allocation of risks which barring the existence of specific agreement between parties would come into play. Under the common law generally (English law specifically), the position is that a party in breach is under an obligation to make good the losses suffered by the non defaulting party. This is subject however to the consideration of the remoteness of damage and the need to take steps to mitigate losses by non-defaulting party. The locus classicus in negligence under tort law, Donoghue v. Stevenson being to the effect that a person who breaches a duty of care owed another, occasioning loss by said breach is under an obligation to pay compensatory damages to make good the loss suffered. In essence the principle of risk allocation in the absence of one put in place by parties is that liability follows breach of contract/duty, and is wedded to fault/blame.

4.2 Liabilities and Indemnities

An indemnity entails a contractual provision where the indemnifying party accepts the payment to the party having the benefit of the indemnity in the circumstance that the indemnifying party suffers loss as a consequence of the happening of a specified event^[92].

A JOA will commonly contain a clause by which the non operators cumulatively and in accordance with their respective percentage interests indemnify and hold the operator harmless against all losses incurred by the JV with the exception of those incurred by the operators' willful negligence^[93]. This is in recognition of the guiding principle behind operatorship, 'no gain no losses. That since an operator acts as an agent of the group and does not stand to benefit any additional profit from his position as operator other than his entitlement as a member of the JV, the law seeks to protect him by ensuring, that he bears no loss either except where he is negligent or willfully misconducts himself. Such losses or liability to third parties include its liability to the government. A PSA would usually have a liability provision which holds the whole group liable, jointly and severally and any liability incurred by them to the state, the state can and will call on any of them to take care of it.

The question may arise as whether the state can call upon its NOC since it is a member of the JV to bear such liability, the short answer will be yes but that then leads to another question of whether it will be willing to call on its NOC to bear such burden. It is important to point out that whether or not the NOC is the one called to bear any liability or obligation owed the state by the JV is not as important as having the right liability regime in place which ensures that irrespective of who is called upon to settle the group's liability, operator as is most often the case or any other member of the JV, such member suffers no extra loss for such from such nomination.

A mutual indemnity is the usual provision for this kind of liability in the oil and gas industry. Under such provision the matrix is arranged in a way that each party is both an indemnifier and the indemnified and whomever a liability

⁹² Ibid @p.444

⁹³ Ibid @p.448

arising from the operation of the group falls on would be in same position with every other member of the JV upon been indemnified by its co venturers.

4.3 Obligation of operator to third parties contractors

The mutual hold harmless (MHH) is the regime which operates widely in the industry and is incorporated into model form service contracts used in the industry, like LOGIC^[94] contracts or the US IADC standard contracts^[95]. It is used principally for two reasons; it allocates the risk to the party best able to bear it. Secondly, it prevents multiplicity of insurance saving the parties cost by so doing.^[96] Under the MHH essentially, the operator bears the responsibility for loss or damage to his property, property of other contractors, personal injuries to operators' personnel and also loss suffered by third parties or to their properties consequent upon the performance of the contract. This usually includes loss or damage occasioned by negligence of the contractor. The contractor for his end will take the responsibility for the loss or damage to its property, personal injury to its personnel, which arises from the performance of the contract, and or pollution, which originates from its equipment^[97].

The established principle of risk allocation for the exploration and production industry is that operators either through self-insurance or insurance bear the risk to third parties when contracting with service providers during drilling contracts. The understanding for this is that the considerable rewards, which accrue from E&P over time, are the operators alone and the contractors or the service providers have no share in this.

Another consideration taken into cognizance for this risk-reward relationship is that is that operators choose the well design /programme and are in charge of its execution and operations at the well site. The importance of this cannot be underemphasized since a good well design and its execution eventually, provide for the correct number of barriers to prevent the spill of petroleum from well to he surface. The operator also monitors the execution of said design/plan at each stage. It is also the operator who chooses from services and/or products offered by the contractors. He also makes the call at each step, to proceed, stop, or modify plans or abandon the well on the basis of situation encountered during drilling. In essence, the operator owns the well and the makes all the decisions on it, while the contractor is simply a little more than the hired hand that renders services based on the direction of the operator.

4.4 Limitation on liability

There is usually a desire by parties to a contract to curb the extent of their liability through the use of what is generally known as 'liability cap'. This is usually a clause, which seeks to limit a party's liability by reference to a total sum payable. The limit or cap may be expressed either as a fixed sum of money or a proportion of the sum payable for the job^[98]. The maximum amount available insurance is usually

factored into such clauses. Such clauses are frequent in oil and gas contracts. A liability cap may be considered less important where an indemnity regime is already agreed upon since they both serve the purpose of shutting out a large number of claims which maybe disproportionate to the gains a party forecasts when commencing the project^[99].

The answer to the question of how a state would handle such a situation of capped liability where the JV group runs into a situation where it becomes liable, how it (the state) allocates available compensation, to whom it is allocated and on what basis, is unclear. It is the opinion of the author that such a situation will be treated on the basis of its merit for each case that may arise. One thing which is however clear is that the state wouldn't want to draw the short end of the straw owing to such caps.

5. Conclusion

Whilst participation agreements and related agreements have shown to be malleable tools for achieving the aims and objectives of host countries, whilst at the same time reducing the economic and political risks inherent in the oil and gas industry, on the part of international oil companies in mineral exploitation and production. It however is not one, which is suitable or even advocated for every state.

The Norwegian experience shows that State participation in the petroleum sector, and an objective-based regulatory legislative framework contributes to the sustainable extraction of petroleum, enabling the government to have a wide discretionary role to implement its national petroleum policies of maximizing the value of petroleum resource development for the benefit of the society. The experience for countries, which do not have the requisite conditions in place to make state participation worthwhile, are not so smooth. Conditions which range from adequate financial provisions on the part of the government to enable it meet its financial obligations as at and when due, willingness and ability to separate its NOC dual role capability as regulator and commercial agent and a host of other factors which make for a good state participation. For such countries, state participation may turn out to be more curse than blessing for them and they should stick to external means of control of their natural resource sector.

6. References

1. Mcpherson C. State Participation in the Natural Resource Sectors: Evolution, Issues and Outlook in Oil and Gas energy Law Intelligence (OGEL). 2004; 2(2):4
2. Nigerian Petroleum Act, Cap laws of the Federation of Nigeria (LFN), 2004, 10
3. Petroleum and Submarine Pipelines Act 1975, repealed by the Oil and Gas (Enterprise) Act 1982, Schedule 4
4. Indonesian PSA, 1970 (later amended in 1980)
5. Vietnam PSA 1990(amended in 2007)
6. Arnesen F *et al.* *Energy law in Norway*. (2nd ed.) Oxford University Press, Oxford, 2007.
7. Daintith T. *Manual of United Kingdom Oil and Gas Law*, (London; Sweet and Maxwell)
8. Duval C. *et al.* *International Petroleum Exploration and Exploitation Agreements: Legal, Economic and Policy Aspects* (New York: Barrows Company Inc.) 2nd ed.

⁹⁴ Cameron, P., Liability for Catastrophic Risk in the Oil and Gas Industry; International Energy Law Review, issue 6, 2012

⁹⁵ LOGIC General conditions of Contract for Well Service available at www.logic-oil.com

⁹⁶ International association of Drilling Contractors; contracts available at <https://store.iadc.org>

⁹⁷ Supra note 96 @208

⁹⁸ Supra note 94 @496

⁹⁹ *ibid* @497

9. Gordon G, *et al. Oil and Gas Law- Current Practice and Emerging Trends* (2nd ed.) Dundee, Dundee University Press
10. Cameron P, Liability for Catastrophic Risk in the Oil and Gas Industry; *International Energy Law Review*, 2012, 6.
11. Chona F. “*El Petróleo en Colombia*”. *Revista del centro de Estudios Colombianos*, 44, 89-101.
12. Dam K. *Oil Resources: Who Gets What How?*, 1976. Available at www.sciencedirect.com
13. Edu KO. A socio - legal appraisal of Nigeria’s joint Venture Arrangement in the Petroleum Industry; *Sri Lanka Journal of International law*, 2010, 22(1).
14. Hunter T. The Role of regulatory framework and state regulation in optimizing the extraction of petroleum resources; a study of Australia and Norway available at www.elsevier.com/locate/exis
15. Joint UNDP/ World Bank ESMAP Reports, Taxation and State Participation in Nigeria’s Oil and Gas Sector 2004, 41.
16. Lerøen BV. *Drops of Black Gold: Statoil 1972–2002*. Statoil, Stavanger, 2002.
17. Zakariya S. New Directions in the Search for and Development of Petroleum Resources in the Developing Countries; *VanderbiltJournal of Transnational Law*, 9.
18. Farjado D. The Restructuring of the Colombian National Oil Company “Ecopetrol”- The Transformation of the Colombian Oil Industry. Research paper, PPE, CEPMLP.
19. Ogunlade A. How can Government best achieve its objectives for petroleum Development? CEPMLP, University of Dundee
20. Ministry of Petroleum and Energy. Norwegian Oil History in Brief, 2006a. <http://www.regjeringen.no/upload/kilde/oed/bro/2004/0006/ddd/pdfv/204702-fact-sog0104.pdf>(accessed 14.07.18).
21. Norwegian Petroleum Directorate. Facts, 2011. <http://www.npd.no/en/Publications/Facts/Facts-2011/> (accessed 14.07.18)
22. Norwegian Petroleum Directorate. Fact Pages: Ekofisk, 2008b. <http://www.npd.no/engelsk/cwi/pbl/en/index.htm> (accessed 21.03.19)