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Oil and Gas Regulation in Nigeria: Why a single regulatory body for the Upstream & Downstream subsectors proposed in the new PIGB may be Counter-Productive

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**Abstract** The Nigeria Petroleum Industry has had different reforms and regulations which were all aimed at charting a transparent and legal framework for regulating the industry. So many Legislative Acts have been enacted since the discovery of oil in Nigeria in 1956. The Government's aim in formulating the different policies have been to develop the oil & gas industry, improve the economy by simplifying the ease of doing business in the petroleum sector, and also increase the standard of living of its ever increasing population.

For this reason, the Government has proposed the creation of the Nigeria Petroleum Regulatory Commission (NPRC) in the new Petroleum Industry Governance Bill (PIGB) as the only regulator to handle all current duties and tasks of the DPR and the PPPRA.

The major problem the industry has had previously is not the enactment or formulation of new policies or regulations, but rather the poor enforcement and implementation of the policies and regulations.

This research therefore, proposes two regulatory agencies for the Nigeria oil & gas industry whereby each focuses on the upstream and the downstream subsectors because the operations and activities of the upstream are clearly different from the downstream. Therefore, the same yardstick cannot be used to regulate the two subsectors. The agencies should be granted autonomy in the discharge of their regulatory functions and free from undue government interference. Furthermore, the functions to be performed by the NPRC stipulated in the bill are too wide and cumbersome, and may result to constant delays in securing the necessary approvals which could make the ease of doing business difficult in the petroleum sector, and consequently have adverse effect on the economy which is largely petroleum based.

Thus, the proposed establishment of the NPRC as the single regulator for the upstream & downstream subsectors may be counter-productive.

### Keywords Petroleum, Framework, NPRC, DPR, PPPRA

#### Introduction

Since oil was first discovered in commercial quantity in Nigeria in 1956 near Oloibiri Village in present day Bayelsa, the Nigeria Federal Government have formulated different policies all aimed at developing the nation oil & gas resources, develop the economy, and ultimately improve the standard of living of Nigerians.

One of the early legislative enactments to regulate the Nigeria oil & gas industry was the Petroleum Act of 1969 which was the first post-colonial law for the oil & gas sector. In addition, there has been general poor enforcement and implementation of oil and gas regulations in Nigeria.

When the DPR was established in the early 1950, it was called the hydrocarbon section of the ministry of Lagos affairs, and reported to the then Governor-General, before its later upgrade to the Petroleum Division under the then ministry of mines & power. By 1970, the division had grown to Department of Petroleum Resources, and in 1971, the Nigeria National Oil Corporation (NNOC) was established in order to manage the commercial



activities in the oil industry for the Government, but the DPR under the ministry of mines continued its regulatory role.

Later on in 1975, the DPR was upgraded to the ministry of energy which would later become the Ministry of Petroleum Resources. In 1977, the Petroleum Ministry was merged with the NNOC to form the NNPC. This also created the Petroleum Inspectorate as a part of NNPC to regulate the industry. Again in 1985, the Ministry of Petroleum was re-established, and the NNPC was reorganized, and the Petroleum Inspectorate was moved to the Ministry of Petroleum Resources and renamed the DPR.

The bill establishing the PPPRA was passed by the national assembly and was accented by the President in May 2003 and further inaugurated the board on the 19<sup>th</sup> of June 2003.

After several policies formulated and repealed previously, the Federal Government setup the Nigeria Oil & Gas Sector Reform Implementation Committee as an attempt to restructure and redirect the industry towards achieving stable development of the industry and the country at large including the oil-producing region of Niger Delta. The outcome of the comprehensive report of the committee is the Petroleum Industry Bill (PIB) and has not been passed in its entirety.

In this perspective, the Petroleum Industry Governance Bill 2017 has been drafted separately to cater for the governance of the country's petroleum industry. The bill according to the Senate, is an act to provide for the governance and institutional framework for the petroleum industry and other related matters. The bill has been approved by the senate and is currently awaiting approval of the president.

#### Research Objectives

- i. Clear definition of the independent roles of the DPR and PPPRA, and specific duties for the upstream & downstream sector regulators.
- ii. Why it may be counter-productive to merge such regulatory agencies together considering the cumbersome and complex nature of their responsibilities as it may result to overall inefficiency and delay in decision making which could slow down the activities of the more dynamic upstream subsector of the Nigeria oil & gas industry with a large considerable foreign investment and participation.
- iii. Rather than merging the DPR and PPPRA into one entity, the need to better strengthen the existing DPR and PPPRA in the discharge of their regulatory functions.
- iv. The DPR and PPPRA should be reorganised in a way it reflects their specific roles as the upstream and downstream sectors regulators respectively.
- v. The need to have all stakeholders on board for any regulatory body to be instituted for the petroleum industry as majority of the stakeholders have been omitted in the proposed bill establishing the NPRC.

## Background of Study

Nanven (2010), identified that the major problem facing the Nigeria oil & gas industry is compromised policy set by the Federal Government. According to Nanven, such problems arise from politics and inflation. He identified critical effects of Government's policy on oil & gas exploration & production in Nigeria which brings about diverse disputes and impediments faced in the industry.

Tijani (2014) presented his findings to explore the relevance of regulatory practices in Nigeria's downstream petroleum sector. The reasons for his research came from problems related to the management of the Nigerian oil sector, identified in the existing literature. These issues are so important that their decisions could have a positive and substantial impact on the Nigerian economy, and the study will fill the gaps in the relevant literature. His results reveal the main shortcomings of regulatory governance practices adopted by Nigeria midstream regulators: the regulatory autonomy of Nigeria's downstream regulators has gradually diminished or non-existence, Nigerian regulators' accountability practices are failing; Lack of openness, lack of consultation and lack of public awareness have affected the transparency of the midstream regulators in Nigeria. Interestingly, the results also show that while Nigerian regulators appear to have the skills to regulate this sector, their talents are not fully exploited.



Eghosa (2016) posits that there is currently command and control regulatory structure being operated in the Nigeria petroleum sector. According to Eghosa, under such regulatory framework mentioned, the regulators believe that they work for the public good. His article focused on the regulatory system in the Nigerian oil & gas industry. Among other things, bureaucratic factors and over-regulation are cited as reasons for the command and control-based regulatory system. He also said that unless there is a change in the country current model or the overall regulatory framework of its oil & gas sector, the underlying issues affecting the industry would never diminish.

#### **Materials and Methods**

#### The Petroleum Value Chain

The key sectors or operations of the oil industry are often referred to as upstream, midstream and downstream subsectors.

The upstream includes the exploration & exploitation of crude oil & natural gas. The upstream petroleum sector is also called the exploration and production sector (E&P). Upstream involves searching for potential oil and gas fields, drilling exploration well to recover the crude oil and /or raw natural gas to the surface.

The midstream includes intermediate storage, marketing and transportation of crude oil, natural gas and liquid natural gas (primarily ethane, propane and butane) and sulfur. Midstream activities are sometimes included in downstream.

The Downstream includes refining crude oil and processing raw natural gas. It involves natural gas processing, sale and distribution of liquefied petroleum gas (LPG), gasoline (or gasoline), jet fuel, diesel, asphalt, Tar. Downstream industries include refining, natural gas distribution, petroleum derivatives, distribution and retail outlets.

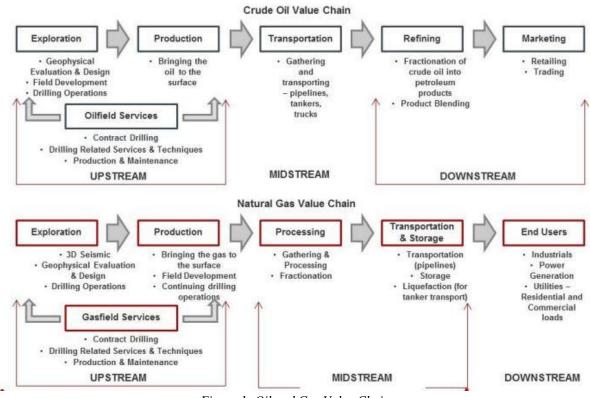


Figure 1: Oil and Gas Value Chain Source: Marine Oil & Gas Academy, MOGA

#### The Petroleum Industry Governance Bill (PIGB)

The PIGB is an aspect of the Petroleum Industry Bill (PIB) that, would create an efficient, vibrant and effective governing institutions for the petroleum industry. This is a result obtained through previous efforts been put to



reform the petroleum industry. It all started during the tenure President Obasanjo in 2000 when the Oil & Gas Implementation Committee (OGIC) was inaugurated. The process was however not concluded until the government of Late President Yar'adua when the OGIC submitted its report document that later arise to the Petroleum Industry Bill which was forwarded to the 6<sup>th</sup> Assembly. Despite having several redrafts and amendments, the 6<sup>th</sup> National Assembly could not pass the bill. After the protest against fuel subsidies in early January 2012, the Minister, Deziani Allison Madueke set up a technical committee to harmonize all versions of the draft bill.

#### The Nigeria Petroleum Regulatory Commission (NPRC)

Part 3, Section4, of the PIGB established the Nigeria Petroleum Regulatory Commission (NPRC). The NPRC will assume the responsibilities, rights, obligations and interests of the DPR, the PPPRA and the Petroleum Inspectorate. The NPRC will become the single regulator for the upstream, midstream, and downstream subsectors of the petroleum industry.

### An overview of the Many Functions of the Proposed NPRC and Separation of Duties

The NPRC shall be saddled with so many responsibilities as stated below which cuts across the different value chains of the oil & gas industry. The responsibilities as assigned in section 6 of the bill are further summarized below.

- i. The NPRC shall issue policies, regulations and laws in respect of every aspect of petroleum operations in Nigeria, while also ensuring the compliance thereof.
- ii. It shall supervise and enforce compliance with all terms & conditions of leases, licenses, and permits that will be issued for every aspect of petroleum operations in Nigeria.
- iii. To define, enforce and approve design standards, construction, fabrication, operations including plants maintenance and installation facilities used or to be used in respect of every aspect of petroleum operations in Nigeria.
- iv. To ensure strict adherence to the applicable national & international environmental and technical standards by anyone involved in respect of every aspect of petroleum operations in Nigeria.
- v. The NPRC shall monitor activities of the holders of the country's leases, licenses, permits and authorizations issued by it or the Minister of Petroleum.
- vi. It shall publish reports and statistics for the petroleum industry.
- vii. It shall establish the structure for validation & certification of Nigeria's hydrocarbon reserves. **Duty of Upstream Regulator**
- viii. Evaluate the country's reserves, and coordinate long term forecasting and carry out reservoir management studies. **Duty of Upstream Regulator**
- ix. It will perform audits of the activities of every operator companies involved in every aspect of petroleum operations so as to ensure strict compliance with Nigerian laws and regulations for petroleum operations. **Duty of Upstream Regulator**
- x. It shall be the duty of the commission to maintain a data bank for the petroleum industry.
- xi. Ensure accurate calibration, as well as certification of every equipment used in the upstream and downstream operations. **Duties to be splitted between the Upstream Regulator and Downstream Regulator**
- xii. Issuing of permits and licenses or authorizations with regard to Seismic, Drilling, fabrication, design, construction, commissioning and decommissioning of upstream & downstream facilities—Duties to be splitted between the Upstream Regulator and Downstream Regulator
- xiii. Conduct, manage, administer the acreages of crude oil & natural gas not yet allocated, including the bid rounds.; **Duty of Upstream Regulator**
- xiv. To issue, review, modify, amend, suspend, extend, cancel, reissue, or terminate upstream licenses in accordance with relevant laws or regulations; **Duty of Upstream Regulator**
- xv. To approve every field development programmes; Duty of Upstream Regulator
- xvi. To allocate petroleum production quotas without discrimination Duty of Upstream Regulator



- xvii. To develop price benchmarks and key elements of midstream & downstream operations; **Duty of Downstream Regulator**
- xviii. To regulate the bulk storage, transmission& transportation of crude oil & gas, and also ensure local demand for petroleum products are met. **Duty of Downstream Regulator**
- xix. To monitor, enforce the application of tariffs and appropriate pricing frameworks; **Duty of Downstream Regulator**
- xx. To monitor the market behavior which includes the maintenance and development of competitive markets; **Duty of Downstream Regulator**
- xxi. To arrest and combat cases of abuse by the larger marketers and restrictive business practices; **Duty** of **Downstream Regulator**
- xxii. To make provision for pumps and metering standards, and ensure it is according to the standards set by the commission; **Duty of Downstream Regulator**
- xxiii. To issue, grant, renew licenses, permits and authorizations including, though not limited to permits, lisenses or authorizations for petroleum products, downstream gas, storage depot, retail outlet, transportation & distribution facilities decide on necessary requirement for applicants.— **Duty of Downstream Regulator**
- xxiv. To amend, modify, review, extend, suspend, cancel and reissue, terminate or revoke permits, licenses, and authorizations;
- xxv. To set rules for petroleum products distribution establish the framework for computing the fair market cost of petroleum products; **Duty of Downstream Regulator**
- xxvi. To develop the market rule for trading and secure the supply of petroleum products and develop the market and competition; **Duty of Downstream Regulator**
- xxvii. To establish measures for adequate protection of customers, consulting with the customers and promote infrastructure development in the downstream. **Duty of Downstream Regulator**
- xxviii. To regulate and ensure supply, marketing, distribution, and retail of petroleum products; **Duty of Downstream Regulator**
- xxix. To enforce the consumer rights on petroleum products or services; Duty of Downstream Regulator
- xxx. To ensure appropriate mechanisms of settling disputes.
- xxxi. To establish, and ensure health, safety and environmental issues are complied with at the refineries, depots, lube plants, petrochemical plants, pipelines & downstream gas plants; **Duty of Downstream Regulator**
- xxxii. To ensure proper blending to fuels and other petroleum derivatives for use in automobiles in Nigeria; **Duty of Downstream Regulator**
- xxxiii. To analyze, promote and supervise the exploration of Nigeria's frontier basins and acreages yet unassigned, and also identifying the opportunities within the acreages. **Duty of Upstream Regulator**

## **Proposed Governing Board of the NPRC**

The governing board of the NPRC shall be:

- i. A Non-Executive Chairman
- ii. Two Non-Executive Commissioners
- iii. The Chief Executive Commissioner
- iv. Four Other Executive Commissioners
- v. A representative from the Ministry of Petroleum Resources
- vi. A representative from the Ministry of Finance
- vii. A representative from the Ministry of Environment

### Current Regulatory Framework for the Nigeria Oil and Gas Industry

There have been several regulations enacted by the government for the regulations of the oil & gas industry previously. The current government agencies used in the regulation of the oil & gas industry are the Department of Petroleum Resources and the Petroleum Products Pricing Regulatory Agency. These two major agencies are



chiefly responsible for the regulation of the upstream, midstream & downstream subsectors of the Nigerian oil & gas industry. But for the purpose of this dissertation, and in regulations consideration, we shall group the activities of the midstream sector of the industry with thedownstream, to have two broad categories of Upstream and Downstream Activities. Also, there shall be no emphasis on the Petroleum Inspectorate which appears only fictionally in the NNPC act.

### The Department of Petroleum Resources (DPR)

The Department of Petroleum Resources has been the major regulatory body for the oil & gas industry. The DPR has performs several operations from upstream to downstream operations.

DPR has the responsibility of ensuring strict compliance to petroleum laws, regulations and guidelines in the oil & gas industry. In discharging these duties and responsibilities, The DPR constantly monitors the operations at drilling locations, producing wells, production platforms, flowstations, crude oil export terminals, retail outlets, refineries, pump stations, storage depots, any other place where petroleum activities are performed.

#### The Management of DPR

- i. Director – He is the chief accounting officer of the DPR responsible for the daily running of the affairs of the DPR.
- ii. Head, Engineering and Standard
- iii. Head, Basinal Assessment & Lease Administration
- iv. Head, Upstream Monitoring & Regulation
- Head, Gas Monitoring & Regulation v.
- Head, Planning vi.
- Head, Finance & Accounts vii.
- viii. Head, Downstream Monitoring & Regulation
- ix. Head, Corporate Services
- Head, Health, Safety & Environment х.

#### **Upstream Functions of the DPR**

The upstream operations are briefly explained below.

- i. Regulation of oil & gas activities
- ii. Implement the government policies on upstream oil & gas matters.
- iii. Administer Oil and Gas acreages and concessions
- Conserve Nigeria Hydrocarbon Resource iv.
- Optimize government take in Oil and Gas activities v.
- vi. Ensure compliance with Health Safety & Environment (HSE) Standards
- Maintain and administer National Data Repository (NDR) vii.

## **Downstream Functions of the DPR**

The DPR also currently performs several downstream operations, covering licenses and approvals for import and export permits for petroleum products, refineries, gas plants, retails outlets, quality and standard of imported products, Petrochemicals, jetties, crude deposits, and so on.

### Petroleum Products Pricing and Regulatory Agency(PPPRA)

The Petroleum Products Pricing Regulatory Agency (PPPRA), in accordance with Law No.8 of May 2003of the National Assembly was established with a clear vision for the realization of a vibrant, strong and dynamic sector of the petroleum industry, in which the refining & distribution of petroleum products will be self-financing and self-sustaining. These measures are aimed at restructuring Nigeria's downstream sector to make it more efficient and transparent.

The Mandate according to the act establishing it, are as follows:

To determine the Pricing Policy for Petroleum Products.



- ii. To regulate petroleum products supply & distribution.
- iii. Establish a repository of information via links with all relevant agencies to facilitate informed and realistic decision-making about pricing policies.
- iv. Ensure that all relevant government recommendations and plans contained in the documents leading to the law are implemented.
- v. Moderate product prices fluctuations for optimal returns to the operators.
- vi. To develop standards and codes of conduct for downstream operators.
- vii. Stay alert to key price policy parameters and regularly approve reference prices for all petroleum products.
- viii. Avoid collusion and harmful business operations in the industry.
- ix. Builds strong relationships with the master classes of the Nigerian community and ensures that its decisions are as easy to understand and support as possible.
- x. If necessary, act as an intermediary between all relevant parts and stakeholders of the sector.

### The Current Governing Board of PPPRA

- (a) A chairman
- (b) One representative each from the following bodies:
  - i. The Nigeria Chamber of Commerce, Industry, Mines and Agriculture (NACCIMA)
  - ii. The Manufacturers Association of Nigeria (MAN)
  - iii. The Nigeria Labour Congress (NLC)
  - iv. The Major Oil Marketers (MOMAN)
  - v. The independent Oil Marketers (IPMAN)
  - vi. The Petroleum & Natural Gas Senior StaffAssociation of Nigeria (PENGASSAN)
- vii. The Transport Owners (NARTO)
- viii. The Nigerian Employers Consultative Association(NECA)
- ix. The Nigeria media
- x. The Federal office of statistics
- xi. The National union of Road Transport Workers(NURTW)
- xii. The Ministry of Petroleum Resources
- xiii. The Ministry of Employment, Labour and Productivity
- xiv. The Ministry of Transport
- xv. The ministry of finance
- xvi. The Central Bank of Nigeria
- xvii. The Presidency
- xviii. The National Manpower Board
- xix. The Nigerian National Petroleum Corporation
- xx. The Nigerian Institute of Management
- xxi. The National Union of Petroleum & Natural Gas Workers (NUPENG)
- xxii. The Trade Union Congress (TUC)
- xxiii. The Depot and Petroleum Products Marketers Association of Nigeria (DAPPMA)
- xxiv. Petroleum Equalization Fund (PEF)
- xxv. The executive secretary of the PPPRA

### The Management of PPPRA

- i. Executive Secretary The Executive Secretary is the chief accounting officer of the PPPRA responsible for the daily running of the affairs of the agency.
- ii. General Manager, Corporate Planning
- iii. General Manager, Finance
- iv. General Manager, Admin/Human Resources
- v. General Manager, Operations



- vi. General Manager, Gas & Renewable Energy
- vii. General Manager, Corporate Services
- viii. General Manager/Head, Lagos Zone
- ix. General Manager, Audit
- x. General Manager, Legal

### **Deregulation of the Downstream Sector**

Simply put, deregulation is to remove government's control from a particular business. Under deregulation, the prices of the commodities are usually determined by the interplay of demand and supply. The PPPRA has the core mandate of ensuring proper implementation of the deregulation of the downstream sector of Nigeria's oil&gas industry. The PPPRA should therefore be empowered to supervise the deregulation activities in an independent regulatory model as the agency currently operates below one-third of its core mandate owing to the controversial subsidy regime.

The main purpose of deregulating the downstream sector is to bring about competition among the marketers and suppliers. This is expected to increase economic efficiency and welfare of the citizens. The PPPRA is being mandated to provide an enabling environment by simplifying the government's regulation and the daily business activities which encourages a free market operation.

Appropriate pricing of petroleum products which will be derived through deregulation is a major factor that will attract investments (both local and foreign) to the downstream sector of the Nigerian petroleum industry. Through this system, petroleum products especially the essential ones such as PMS, DPK, AGO and ATK, among others will be set by the independent marketers and the power of demand and supply.

The deregulation if properly implemented will ease the frequent fuel scarcity which has often crippled economic activities at such times.

If we are to achieve a properly deregulated downstream sector, then there is need to avoid possible failures in the implementation of the policies leading to the deregulation. PPPRA should be allowed to continuously monitor the process even till after the post deregulation era.

## Oil and Gas Regulation in some other Jurisdictions Venezuela Oil & Gas Industry

In Venezuela, there is no separate agency in charge of regulating and overseeing the conduct of oil & gas activities in Venezuela. All regulatory and overseeing duties are carried out by the Ministry of Energy & Petroleum through Petróleos de Venezuela, S.A. (PDVSA).

As a result of political interference on PDVSA, Venezuela's oil production is currently on the brink of collapse. Putting the entire Venezuela oil and gas resources under the control of PDVSA never yielded the desired results for the economy. When the oil price slumped in 2014, PDVSA was plunged into crises and desperate for cash to service its debt burden and it became very difficult to invest in the oil & gas facilities or even to maintain them properly.

The effect of the cash drain was compounded by mismanagement at PDVSA. Although PDVSA had performed better under the former President, Hugo Chavez, with relative transparency in its operations, but it now appears that PDVSA has no control or management. It's a set of fiefdoms (Monaldi, 2014). Dozens of PDVSA executives have been detained on charges of sabotage and corruption at different times, thereby paralysing decision-making. All these brought activities in the entire Venezuela oil and gas industry to a hurt, without meaningful development, and has plunged the country into further crisis.

## Algeria Oil & Gas Industry

The backbone of Algeria's economy is crude oil, and accounts for roughly 60percent of revenues, 30percent of GDP, and over 95percent of export earnings. Algeria has the 8<sup>th</sup> largest-reserves of natural gas in the world, the 4th largest-gas exporter and fifteenth-largest oil reserves.



Algeria is the largest country in Africa and the Arab world with a total landmass of 2.38 million sq. km. The country is rich in natural resources; an OPEC member, Algeria has the tenth-largest proven reserves of natural gas in the world and is the sixth-largest gas exporter. It also ranks 16th in proven oil reserves.

For several years, Sonatrach was the only government regulator for the Algerian oil and gas industry. The role of Sonatrach as the sole regulator created conflict of interest, slow decision making, inefficiency, and low foreign investments in the industry. But in 2005, the application of the new hydrocarbon system was done to liberalize the oil extraction and exploration industry of Algeria, and relieving the national oil company, Sonatrach, in particular, of its regulatory function, and simplification of the legal system and taxes. The liberalization of 2005 led to the creation of two new entities.

This is the most important change in the hydrocarbon legal system. The two institutions are l' Agence Nationale de Contrôl et de Regulation des Activites dans le domain de Hydrocarbures (responsible for technical regulations and compliance) and l' Agence Nationale pour la Valorisation des Resources en Hydrocarbure (responsible for promoting the oil industry and oil contracts). Some of the main legal instruments have been put in place: exploration permits, exploration / mining contracts and pipeline transportation.

l' Agence Nationale de Contrôl et de Regulation des Activites dans le domain des Hydrocarbure (ARH) is responsible for implementing the regulations contained in the 2005 Hydrocarbons Act, including implementing of technical regulations on transport tariffs and third party access to pipelines and storage facilities, construction specifications, health, safety and environmental issues.

l' Agence Nationale pour le Valorisation de Ressources Hydrocarbure (ANALFT) is in charge of promoting the oil industry and establishing oil contracts. His responsibilities include promoting specific up-front investments, managing and issuing exploration licenses for previous data banks, ordering and evaluating special offers for exploration and production contracts, awarding exploration & production contracts, exploration and production contracts, evaluation and validation. At the same time, develop and improve production. Maintain resources, evaluate and collect a series of taxes.

### **United Arabs Emirates Oil & Gas Industry**

The United Arabs Emirates (UAE) is the eight-largest world proven reserves of crude oil, just behind Saudi Arabia, Venezuela, Canada, Iran, Russia, Iraq, and Kuwait. At the end of 2016, the United Arab Emirates had proven crude oil reserves of 97.8 billion bbl, accounting for 5.7% of the world's proven reserves. The country's crude oil production according to OPEC's statistical data was 3.088 million bpd in 2016. The UAE has the seventh largest natural gas reserve in the world after Iran, Russia, Qatar, Turkmenistan, US and Saudi Arabia. At the end of 2016, total proved natural gas reserves were 6.1 trillion cubic meters, representing about 3.3% proven reserves in the world. In UAE, the oil and gas sector accounts for more than 1/3 of its gdp.

The United Arabs Emirates has several regulators for the country's oil & gas industry with each of the seven emirates having its own set of rules and policies governing the regulation of the petroleum industry in that jurisdiction. Each Emirates is entrenched with the rights to the oil & natural gas resources within the particular emirate. This implies that each of the seven emirates such as Abu Dhabi, Ras Al Khaimah, Dubai, Sharjah, Fujairah, Umm Al Quwain and Ajman all oil and gas activities in the UAE have different policies and regulators.

For example, Abu Dhabi, the largest of the seven Emirates, the supreme petroleum council regulates its oil & gas policy.

Sharjah petroleum council is responsible forthe regulation of the oil & gas industry in Sharjah.

In Dubai, the department of Oil Affairs performs the regulation for the oil & gas industry of Dubai Emirate. All other the other emirates equally have different regulators as well for regulating its petroleum activities.

## Canada Oil & Gas Industry

Canada is the world's 4<sup>th</sup> largest-producer ofcrude oil and third largest in terms of reserves behind Saudi Arabia and Venezuela with about 171.4billion barrels of proven oil reserves. Canada ranks as the fifth-largest natural gas producer in the world, behind the United States, Russia, Iran and Qatar. As at 2016, the country had approximately 77 trillion cubic feet of proved natural gas reserves.



In Canada, there is no single regulatory body governing the development of oil & natural gas. The Provincial Governments of Canada sets different regulatory bodies for overseeing and monitoring the oil & gas activities in each Province. The national Energy Board (NEB) mainly handles the interprovincial pipelines and energy development, while each province has its own regulatory body. For instance in Alberta, the Alberta Energy Regulator (AER) is responsible for oil and gas regulation in the province of Alberta. Canada currently has ten provinces, and each of the provinces has its own regulator.

#### **Turkey Oil & Gas Industry**

In Turkey, the General Directorate of Petroleum Affairs (GDPA) is the relevant authority in the regulation of upstream activities including exploration, exploitation and all permitting processes.

The Downstream activities in Turkey's oil &gas industry are regulated under the Petroleum Market Law. The Energy Market Regulatory Authority (EMRA) is the relevant authority saddled with the responsibilities of regulating and overseeing all activities of the downstream sector of the petroleum industry.

#### **Indonesia Oil & Gas Industry**

Indonesia is currently ranked as the tenth largest-producer of Natural gas in the world having estimated proven natural gas reserves of 101.2 trillion cubic feet according to BP statistical review 2017. At the end of 2016, the country's crude oil reserves were estimated at 3.3 billion barrels .The oil & gas sector includes the activities of the upstream & downstream and are regulated separately. Upstream (Exploration and exploitation) activities are administered by Government Regulation No.35 of 2004 on upstream oil & gas activities. The upstream is managed by the special task force for upstream oil and gas activities (SKK Migas).

The Downstream activities include processing, transportation, storage and trading, and are separately regulated. The Downstream operations are regulated by the downstream oil & gas regulatory agency (BPH Migas).

#### **Norway Oil and Gas Industry**

Norway is a top crude oil & natural gas producer and exporter in Europe, having estimated crude oil reserves of 3.87 billion cubic meters and natural gas reserves of 4.209 billion cubic meters oil equivalent according to the Norwegian Petroleum Directorate (NPD). The Norwegian oil & gas industry is grouped mainly into the Upstream & Downstream sectors with different regulation. The Upstream sector is thoroughly regulated by the Norwegian Petroleum Directorate (NPD) and the ministry of petroleum & energy, while the downstream sector is not heavily regulated and it is market based. With this regulatory structure, Norway has had a very stable oil and gas industry since oil was discovered in commercial quantities in the Scandinavian country in 1969.

The Norwegian economy has depended largely on exports of crude oil and natural gas, which according to the European Commission in 2018 contributed 22% to its GDP, 67% to Norway's export; and according to the Norwegian Ministry of Petroleum and Energy contributed 19% to its annual revenue in 2018.

Also, Norway has continued to attract foreign investors to its ever growing petroleum industry whose crude oil and gas are produced mainly from the Norwegian Continental Shelf (NCS). All these have been made possible due to its stable oil and gas regulatory structure.

### **Results and Discussion**

## Lapses in the Composition of the Board of the NPRC as Compared to the Current Board of the PPPRA

The composition of the NPRC does not reflect the interest of all stakeholders in the Nigeria oil and gas industry, including the organized business, employers of labour and organized labour. These bodies are very pivotal in resolving labour management in the oil & gas industry, particularly in the downstream sector where these issues seems to persist more.

Table 1: Comparison of the Boards of PPPRA & NPRC

S/N PPPRA Governing Board	NPRC Governing Board	Remarks	on	the
		proposed	N	PRC
		Board		



1	A chairman	A Non-Executive Chairman	Should be retained
2	Nil	Two Non-Executive Commissioners	Should be retained
3	The Executive Secretaryofthe PPPRA	The chief Executive Commissioner of the NPRC	Should be retained
4	Nil	Four Other Executive Commissioners	Should be retained
5	A representative of the ministry of	A representative of the Ministry of	Should be retained
	petroleum Resources	Petroleum Resources	
6	A representative of the ministry of finance	A representative of the Ministry of Finance	Should be retained
7	A representative of the Central Bank of Nigeria	Nil	Should be Included
8	Nil	A representative of the Ministry of Environment	Should be retained
9	A Representative of NACCIMA	Nil	Should be Included
10	A Representative of MAN	Nil	Should be Included
11	A Representative of NLC	Nil	Should be Included
12	A Representative of MOMAN	Nil	Should be Included
13	A Representative of IPMAN	Nil	Should be Included
14	A Representative of PENGASSAN	Nil	Should be Included
15	A Representative of NARTO	Nil	Should be Included
16	A Representative of NECA	Nil	Should be Included
17	A Representative The Nigeria Media e.g NUJ	Nil	Should be Included
18	The Federal Office of Statistics	Nil	Should be Included
19	A Representative of NURTW	Nil	Should be Included
20	Federal Ministry of Employment, Labour and Productivity	Nil	Should be Included
21	Federal Ministry of Transport	Nil	
22	The Presidency	Nil	Should be ignored to provide autonomy for the Commission
23	National Manpower Board	Nil	Should be Included
24	Nigerian National Petroleum	Nil	May be replaced with a
	Corporation		representative of the
			Proposed Nigeria
			Petroleum Company (NPC)
25	Nigerian Institute of Management	Nil	Should be Included
26	A Representative of NUPENG	Nil	Should be Included
27	A Representative of TUC	Nil	Should be Included
28	A Representative of DAPPMA	Nil	Should be Included
29	A Representative of PEF	Nil	

## The Different Management of the DPR and the PPPRA

Section 20, subsection 1 of the bill states that "thereshall be for the Commission a Chief Executive Commissioner who shall be the chief executive and accounting officer of the Commission responsible for the day-to-day running of the affairs of the Commission". This will no doubt, mount undue pressure on the chief executive of the commission who would now be in charge of operations of the entire industry both upstream and downstream.



In addition, the current management roles of the DPR and PPPRA are very different. Merging such distinct roles or responsibilities into one may result to bureaucracy.

 Table 2: The Different Management of DPR and PPPRA

S/N	THE MANAGEMENT OF DPR	THE MANAGEMENT OF PPPRA
1	Director	Executive Secretary
2	Head, Planning	General Manager, Corporate Planning
3	Head, Corporate Services	General Manager, Legal
4	Head, Finance & Accounts	General Manager, Finance
5	Head, Engineering and Standard	General Manager, Admin/Human Resources
6	Head, Basinal Assessment & Lease Administration	General Manager, Operations
7	Head, Upstream Monitoring & Regulation	General Manager, Gas & Renewable Energy
8	Head, Gas Monitoring & Regulation	General Manager, Corporate Services
9	Head, Downstream Monitoring & Regulation	General Manager/Head, Lagos Zone
10	Head, Health, Safety & Environment	General Manager, Audit

#### Conclusion

The Nigerian oil & gas sector is a very critical and arguably,the most important sector in Nigeria's Economy. It accounts for over 95% of export earnings and about 40 per cent of the government revenue. Care must be taken in policy formulation and implementation in the sector. Of the two broad subsectors in the oil & gas industry such as the Upstream and Downstream, the upstream arguably contributes more of the revenues which includes the coordination of all exploration & production activities. The activities of the upstream and downstream as seen are distinctively different from those of the downstream. Some of the key policies which are currently being under the regulations of the existing agencies shall be discussed here as well as their progress so far. The Nigeria Petroleum Regulatory Commission may be a sort of distraction in the supervision of some of this ongoing projects as well as possible conflicts of interest.

In order for the country to have a vibrant and competitive industry, we should formulate policies that can fit perfectly in our current situation, so as not to collapse the efficient management of the oil & gas industry. The Nigeria oil & gas industry already has numerous problems bedevilling it both in the upstream and more in the downstream. Instead of having lump sum or accumulated problems, it is best to breakdown the problems and handle them separately by different agencies. We cannot use the same yardstick to regulate the upstream & downstream sectors as this will not be industry friendly bearing in mind that the operations and nature of the upstream are clearly different from the downstream. What the country needs in the oil & gas industry is to create a very focused and robust structure for governing Nigeria's petroleum industry as this will bring a far reaching effect and effectiveness going into the future.

### Recommendation

- i. There should be two regulatory bodies for the petroleum industry, each for the downstream and upstream sectors separately.
- ii. There should be a simplified arrangement whereby the PPPRA is well positioned to carry out its commercial regulation. It should be fully empowered with the relevant personnel, experience and structure to regulate the downstream sector activities.
- iii. The downstream regulator should aim to properly commercialize the sector it regulates.
- iv. The PPPRA since its creation has restored the commercialization of the downstream sector by encouraging private investments, and should therefore be allowed in performing that distinctive function.
- v. The DPR should be strengthened and granted autonomy to regulate and monitor the upstream sector.
- vi. The upstream regulator should perform all oversight functions at ensuring the commercialization of the sector as currently been carried out by the DPR to ensure that all government's takes and royalties are fully remitted.



- vii. The decision to have a single regulator for the industry may increase the difficulty to do business in the industry as it will be cumbersome and persistent delays to secure approvals to conduct oil and gas business, a situation which the DPR has efficiently managed in recent times, with outstanding success.
- viii. As seen in sections 4,5,6,7 & 8 of the Petroleum Industry Governance Bill (PIGB), the responsibilities to be carried out by the proposed NPRC are too wide, cutting across many value chains of the petroleum sector. There are bound to be constant consultations from different government agencies who have one function or the other related to the petroleum sector. These constant interactions with other sister agencies and responses may experience sluggishness or delayed responses as everything centres on the desk of the Chief Executive Officer of the Commission.

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