AN APPRAISAL OF THE INSTITUTIONAL FRAMEWORK ON DECOMMISIONING OF PETROLEUM INSTALLATIONS IN NIGERIA*

Abstract
It is a fact that the operating life of oil and gas fields is a limited one, and when a field reaches the end of its operational life, a plan must be in place to have it plugged and to have its disused operations – to some extent or other – removed. This process is known as decommissioning. It has been observed that 'to date, decommissioning has been comparatively infrequent'. This trend is however set to be markedly reversed over the next few decades as a number of fields reach the end of their viable production lives. Given the extensive costs involved and the potential impact on such costs by a wide spectrum of variables – some predictable and controllable, others not – it comes as no surprise that companies in the oil and gas sector are voluntarily seeking to more systematically and comprehensively manage the full cycle of their operations. It is on the basis of the above that the aim of this article is to examine the institutional frameworks in Nigeria that regulates issues relating to decommissioning of oil installations. The objective of this article is to appraise the effectiveness or otherwise of the institutional regime put in place in Nigeria with respect to decommissioning. The doctrinal research methodology was adopted in this paper as the primary and secondary sources of law were relied upon. This paper found that though a robust regulatory regime is in place in Nigeria, but poor funding and technical expertise has hindered them from living up to expectations. This paper recommended amongst others that a special agency saddled with decommissioning should be created in Nigeria.

Keywords: Decommissioning, sustainable development, petroleum installations, petroleum industry

1. Introduction

Nigeria is a coastal state of West Africa bordered in the North by Niger Republic, in the West by Benin Republic, in the East by the Republics of Chad and Cameroon and in the South by the Atlantic Ocean. Until 1 October 1960 when it became an independent nation it was a colonial dependency of the United Kingdom; consequently, its legal system is based essentially on the British Common Law. Petroleum resources are the main exports of Nigeria accounting for about 96% of export revenues. Nigeria is one of the founding members of the Organisation of African Unity, now African Union[1] and became a member of the Organisation of Petroleum Exporting Countries (OPEC) in 1971 and is the 6th largest producer of oil in OPEC with proven reserves of 35.2 Billion Barrels of Crude Oil and 159 Trillion Cubic Feet of Natural Gas by 2004 estimates.[2] Exploration for crude oil commenced in Nigeria in 1937 when Shell D'Arcy was granted the sole concessionary rights over the whole territory of the country Nigerian National Petroleum Corporation (NNPC).[3] Crude Oil was first discovered in commercial quantity in Oloibiri in present day Bayelsa State in 1956 when Shell D'Arcy drilled the first successful well.[4] That same year, Shell D'Arcy changed its name to Shell-BP Petroleum Development Company of Nigeria Limited. It continued development activities in 1957 and the first shipment of crude oil from Nigeria took place in 1958.[5] According to Fayose, as quoted by Oloruntegbe and others, 'The first cargo of crude oil was shipped in February 1958 through the oil tanker ship *Hemisfusus* to Britain'.[6] As the economy of the nation grew, demand for petroleum products was met by importation. A publication by Ugwukah and Ohaja[7] puts this in perspective: 'Nigeria's proven oil reserves are estimated by the United States Energy Information Administration (USEIA) as between 16 and 22 billion barrels (3.5 × 109 m3), but other sources claims there could be as much as 35.3 billion barrels(5.61 × 109 m3). Its reserves make Nigeria, the tenth most petroleum-rich nation and, by far, the most affluent in Africa. Nigeria has a total of 159 oil fields and 1481 wells in operation, according to The Ministry of Petroleum Resources.

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[1] The Charter of the Organization was signed in Addis Ababa, Ethiopia on 25 May 1963 by 32 independent African countries. <https://www.oau-creation.com> accessed 2 May 2022.

[2] <http://www.eia.doe.gov/emeu/cabs/nigeria.html> accessed 21 June 2022.

[3] NNPC Archives, 2018.

[4] O Akpezi, *Legal Issues in the Niger Delta Resource Dilemma* (2nd edn. Port Harcourt: Anpez Centre for Environment and Development Publications 2018) 11.

[5] D Yergin, *The Prize* (New York: Free Press 1991) 527.

[6] K O Oloruntegbe, M A Akinsete, and M O Odutuyi, 'Fifty Years of Oil Exploration in Nigeria: Physicochemical Impacts and Implications for Environmental Accounting and Development' [2009] (5)(12) *J Applied Science Res*. 2131 – 2137

[7] A C Ugwukah, and O J Ohaja, 'A Historigraphic Assessment of the Petroleum Industry and its Impact on the Nigerian Economy' [2016] *Hist Res Letter*. 36

2. International Decommissioning Issues

There is a great variety of installations, each designed for a particular set of conditions: ranging from fixed shallow-water structures in 30m of water to tension leg platforms in 900m of water. Some 490 installations (excluding subsea facilities) are located in the North Sea and the North East Atlantic. The majority of platforms, around two-thirds, standing in less than 75m of water or weighing less than 4000 tonnes, are referred to as small structures. The remaining platforms, mainly in Norway and the UK, comprise 112 large steel structures -which may be as high as the Eiffel Tower and have a footprint the size of a football field - and 28 concrete gravity base structures. In addition, there are some 26 floating installations. Over the next 10 - 20 years, an average of 15 - 25 installations is expected to be abandoned annually in Europe.[8] This represents, amongst other materials, 150,000 – 200,000 tonnes of steel per year. The continental shelf bordering the states of the European Community and Norway counts some 600 offshore oil and gas platforms, 400 subsea structures and 600 subsea wellheads. The choice of decommissioning procedure is subject to stringent and extensive international regulations. Still, considerable discretion is left to national governments. In 1958, the Geneva Conference adopted a Convention on the continental shelf, requiring that an offshore installation being abandoned must be entirely removed. The 1982 UN Conference of the Law of the Sea introduced some exceptions, allowing some installations to be left in place as long as requirements linked to navigational safety, fisheries and environmental impact were met.[9] The 1989 UN International Maritime Organisation (IMO) Guidelines for the Removal of Offshore Installations required that abandoned structures standing in less than 75m of water and weighing less than 4000 tonnes in air, excluding the topsides, must be entirely removed. Platforms exceeding those limits need to be cut off to allow 55m of clearance between their highest point and the surface. The water depth limit will increase to 100m for new platforms installed after 1 January 1998. Disposal at sea of offshore installations in the North Sea or North East Atlantic is regulated by the Oslo and Paris Conventions. These two conventions were merged into one (OSPAR) in 1997. Following the Brent Spar controversy, the OSPAR countries reached a unanimous agreement in 1998 for the future rules for disposal of petroleum installations. The vast majority of existing offshore installations will be re-used or returned to shore for recycling or disposal. Exceptions are made for certain installations or parts of installations in the event that an overall judgment in each case gives good reasons for sea disposal. For those installations where there is no generic solution, one should take a case-by-case approach, and considerable discretion rests with local governments. In the decommissioning process, a vital issue that needs to be given attention, since they seem to have some influence on both international legislation and disposal decisions, are the population's willingness to pay for a clean environment, a public good, and reputation effects stemming from decisions on disposal options.

3. Why Decommissioning?

The petroleum industry has generated both energy and income to the oil and gas producing countries. However, when a field ends its production life, those who have had benefits from these resources will have the responsibility to remove the facilities according to current regulations and often this means to restore the area as close as possible to the original state. This means that there will be expenses related to the field when it is not generating income anymore and this makes it less tempting to carry through with decommissioning activities. The decommissioning is the field owners' responsibility, but the expenses are shared with the Government. There are several factors that are important to why decommissioning has to be done, and these reasons will be presented here. The superior reason will be the environment and other ocean users. To those that are paying for the decommissioning project it is no doubt that regulations is very important as regulations decides which removal options that are available. Without clear restrictions it can be assumed that not as many installations would have been fully removed. After all, complete removal is more expensive than partial removal and it has to be assumed that it could be tempting to some companies to choose other solutions if they could.

The decommissioning plans have to be approved by the Government before they can be carried out and in the OSPAR area, the member countries have to approve as well. However, this is not always enough. The Brent spar was approved for deep water disposal in the mid 90s, but this was never carried through. The public opinion should not be underrated, and in the Brent Spar case, another solution was chosen in the end because of the company's reputation. Even if the deep water disposal solution was found to be less expensive than other options as well as having little environmental impact, this was not approved by the public. It turned out later that the spar contained less harmful substances than Greenpeace claimed, but it was still taken ashore for dismantling, recycling and disposal. This shows that the public opinion is also important to why decommissioning is carried out even if the environmental reasons are the background for the public's opinion.

[8] P Osmundsen, & R Tveteras, 'Decommissioning of Petroleum Installations: Major Policy Issues' [2003] 31 *Energy Policy.* 1579.

[9] I L Worika, 'Towards a Sustainable Offshore Abandonment/Rehabilitation Policy in Africa: Part 1' [2000] 10 *IELTR* 235 - 240.

The issues regarding environmental impact do not have to be proved to influence the public's opinion. There is an aesthetic part of it as well. Even if the facilities are not visible or accessible from shore, people can think it is better with preserved scenery than one that is not. The public opinion has to be considered because it can cause trouble if it is not taken into account.

When platforms are shut-down, the equipment is still in working order. Depending on the time it takes from shut down to removal, some of it can be reused at other facilities. This is not a very common way of removing the equipment, but it could give some income if it is in good condition and it is sold. When the platforms are dismantled, it is possible to recycle most of the platforms if it is focus on reuse and recycling on the onshore dismantling site. During the work on the Maureen Alpha, 99.5% of the platform was reused/recycled.[10] This is very good from an environmental point of view and it contributes to sustainable utilization of materials.

Another factor that makes decommissioning of oil and gas installation important is the inhabitants of the marine environment. Many areas with petroleum installations are interesting fishing areas as well. These areas have been closed for fishing activities as long as the petroleum activities have been ongoing. The fishing fleet will want access to the areas when the production at the field ceases. This access can only be given when it is safe to do so, and often this means that facilities have to be removed. When everything has been removed it has to be verified that the seabed is clear of any debris. After this is done it will be safe for the fishing vessels to use their gear in the area. Especially for trawlers it is important that the seabed is cleared. Fisheries harvest the benefits of the ocean, but it has to be ensured that there is something to harvest. Although removal of the petroleum facilities gives an economic benefit to the fishermen, it is not the only value to be considered. In Gulf of Mexico (GOM), various types of marine life lives on or around the platforms.[11] When the platform is removed the habitat disappears and the marine life does as well. It is not confirmed if the platforms generate more marine life with their presence or if it only attracts existing life. Until this is clarified it cannot be ruled out that removing jackets and taking them for onshore disposal actually leads to less marine life. To leave jacket structures behind as artificial reefs can therefore contribute to protect marine ecosystems.[12]

4. Institutional Frameworks on Decommissioning in Nigeria

The following institutions play critical role in the decommissioning process in Nigeria:

Federal Ministry of Environment

The Federal Ministry of Environment (FMEnv.) was established in 1999 by President Olusegun Obasanjo's democratically led Federal Government, as the apex authority dealing with environmental matters.[13] The Ministry took over the responsibilities and powers of the defunct Federal Environment Protection Agency (FEPA) as stipulated in the Federal Environmental Protection Agency (FEPA) Act.[14] The responsibilities of the FMEnv include the issuance of Environmental Impact Assessment (EIA) guidelines in respect of the industrial project for oil and gas exploration and production with respect to the following: (a) Onshore; (b) Offshore; (c) Oil and gas pipelines (onshore and offshore); (d) Petrochemicals; and (e) Petroleum refining.[15] The oil and gas pollution control unit of the DPR was also specifically transferred to the FMEnv by the legal instrument that established the Ministry.[16] The Federal Ministry of Environment, being the apex environmental regulatory authority, has developed guidelines to guide facility owners on the appropriate processes to follow for successful decommissioning of a facility and rehabilitation of the surrounding environment.[17] The purpose of

[10] K Kristing, Removal and Deconstruction of Maureen Alpha Platform. The world largest gravity based steel platform. The Fourteenth International Offshore and Polar Engineering Conference - ISOPE 2004, May 23, 2004 - May 28, 2004, Toulon, France, International Society of Offshore and Polar Engineers.

[11] M J Kaiser, and R C Byrd 'The Non-Explosive Removal Market in the Gulf of Mexico' [2005] (48)(7-8) *Ocean & Coastal* Management. 525 - 570.

[12] L S Breidablik, 'Heavy Lift Methods in Decommissioning of Installations' (Unpublished M.Sc. Thesis, Norwegian University of Science and Technology 2010).

[13] The FMENV was established by the office of the Secretary to the Government of the Federation via the Presidency Circular Ref. No. SGF S. 22/1 dated 12th October, 1999. The Ministry has a primary mandate to protect and improve water, air, land, forest and wild life of Nigeria pursuant to S. 20 CFRN 1999 (as amended)

[14] The FEPA Act was repealed by the National Environmental Standards Regulation Agency (NESREA) Act, 2007.

[15] I Okukpon, 'Phasing out Gas Flaring in Nigeria: A Critical Assessment of the Regulatory Regime' (Unpublished LL.M Paper, University of Cape Town 2010) 35.

[16] R Lukeman, 'Environmental Guidelines and Standards for Petroleum Industry in Nigeria (EGASPIN). <htpps://www.drp.gov.ng/index/egaspin> accessed 10 January 2022.

[17] Federal Ministry of Environment, 'Environmental Impact Assessments Guidelines for Decommissioning'

the guideline is to provide clear directions and guidance on the step by step process involved in decommissioning a facility in Nigeria. The guideline is to aid in achieving an effective and environmentally sustainable decommissioning process that shall be compatible with intended future land use on health concerns and environmental impacts. According to the guideline, the proponent/facility owner with his structured team executes the decommissioning process under the supervision of the decommissioning team from the Federal Ministry of Environment. The guideline further provides that the decommissioning process begins with the development of a decommissioning plan in line with the Ministry's stated guidelines in relation to environmental sustainability. The proponent shall begin the planning for decommission from the design stage of the facility and shall continue throughout the lifetime of the facility. The planning shall include;

i. preparation of an initial decommissioning plan
ii. Collection of relevant information and data to facilitate future decommissioning
iii. Selection of a decommissioning strategy
iv. Characterization of the facility
v. Preparation of a final decommissioning plan
vi. Estimation of costs
vii. Identification of the provision of financial resources for the decommissioning project
viii. Submission of the plan to the regulatory body for review and approval
ix. Public consultation in accordance with national requirements, and
x. Consideration of clean up, removal and disposal of materials.

Decommissioning Options

According to the Guideline, decommissioning projects/facility options suitable for the proponent shall be stated in the decommissioning plan. The options include: (1). Project/ Facility mothballing - the termination of a facility with the intention to maintain building structures, and machineries in state suitable for re-use upon re-activation by which access to the industrial site shall be monitored and controlled by government agencies to ensure compliance with applicable regulations while rehabilitating and treating contamination at the site. (2) Partial facility decommissioning - This shall be applicable if a part/section of the facility is to be shut down or when the facility is very large and complex. Partial decommissioning shall also be used for complete decommissioning if the environmental and financial cost of complete decommissioning is too high. (3). Complete site decommissioning - Complete decommissioning of a facility is the total closure of an industrial site. It involves the application of all the principles and regulations necessary to protect human health and safety, and minimize environmental hazards.

Basic Requirements for Decommissioning

Decommissioning requirements expected of facilities is to provide acceptable standards required for eliminating environmental and health hazards during decommissioning and site clean-up. These requirements are applicable to development of decommissioning plan in line with regulatory authorities' framework on human health and environmental safety.

Decommissioning Process

When the life cycle of a facility has been exhausted, the proponent shall consider decommissioning the facility. They are key steps of the decommissioning process to adhere to before the approval of the destruction of a facility. The key steps proponents and relevant participatory bodies shall adhere to are:

Notice of intent

The proponent shall develop a notice of intent and submit to the Federal Ministry of Environment informing the FMEnv of his intention to decommission. The notification shall be submitted prior to obtaining a facility disposal form.

Acquisition of Project Disposal Form

The proponent shall acquire a 'project disposal form' from the Federal Ministry of Environment as a means of registration and proper documentation at the ministry upon the payment of certain prescribed fees. The disposal form shall contain the following information: (a) General information of the licensee, (b) Facility location, company name, license number, expiration etc, (c) Inventory of samples collected.

Submission of the project disposal form

After filling out the disposal form appropriately, the proponent shall submit the form back to the ministry with the relevant requested documents.

Decommissioning Team Setup

The proponent shall be required to set up a decommission team that entails but is not limited to:

i. Scrutiny members – reviews plan and changes to policies of decommissioning activities.
ii. Governance board – determines appropriate decision-making process, approves decommissioning recommendations and leads stakeholder engagement and communications.
iii. Head of projects/ project manager - A senior level individual to lead the decommissioning process and development of strategy.
iv. Lead officer - manages the operational decommissioning process and implements stakeholder engagement and communications plan.
v. Category manager - Managers for different categories; Facilities Management, Health, Planning and Environment etc.

Individuals who are experienced in assessing and analyzing contaminant problems as well as specialists familiar with the operations of the industrial sector shall be on the proponent team.
The Ministry shall also set up a decommission committee for the purpose of monitoring the decommissioning process.

Upstream Regulatory Commission

The Upstream Regulatory Commission (URC), formerly the Department of Petroleum Resources can be described as the enforcement unit of the Ministry of Petroleum Resources (MPR). The URC enforces the policies and regulations formulated by the MPR. It has the statutory mandate or responsibility of ensuring compliance with petroleum laws, regulations and guidelines in Oil and Gas Industry. The duties or functions of URC include:

(a) Supervising all Petroleum Industry operations being carried out under license and leases in Nigeria.
(b) Monitoring the Petroleum Industry operations to ensure that they are in line with national goals and aspirations including those relating to flare down and Domestic Gas Supply Obligations.
(c) Ensuring that Health Safety & Environment (HSE) standards.
(d) Implement government policies on Gas matters.[18]

As seen above, the URC also monitors the oil and gas companies' operations to ensure consistency with international industry standards and practices and issues the annual permit (URC permit) to the companies, without which they would be unable to operate in the industry. Furthermore, it assists the MPR in overseeing all companies in the downstream, midstream and oil services section of the oil and gas industry.[19] One of the ways the URC ensures compliance is by the issuance of regulations and standards for the conduct of exploration and production operations. An instance is the issuance of Environmental Guidelines and Standards for Oil and Gas Industry (EGASPIN) in 1991 which was revised in 2002.[20] The enforcement responsibility of the URC is sometimes flawed by the lack of technical capacity. Example is the Regulation which makes it mandatory for a licensee who desires to change the nature of the fluid transmitted form sweet to corrosive gas, to apply to URC for permission to do so.[21] In most cases, URC does not strictly enforce this regulation as a result of lack of technical capacity to monitor what flows in the pipeline, at all times. The same is the case when it comes to the monitoring and reporting the volume of gas that an oil and gas company is allowed to flare in accordance with the permit granted it by the Minister. Again, the lack of the will or capacity is a source of serious concern. The fact that the current version of EGASPIN was last updated in 2002,[22] about 14 years ago, is a clear indication that the current guidelines are not in accordance with the current best practices obtained in today's global oil and gas sector.

National Environmental Standards Enforcement Regulations Agency (NESREA)

The NESREA Act establishes the National Environmental Standards and Regulation Enforcement Agency and it is currently the major federal body charged with the protection of Nigeria's environment. NESREA was created to replace the defunct Federal Environmental Protection Agency (FEPA). Section 7(a) states that the Agency is authorised to enforce compliance with laws, guidelines, policies and standards of environmental matters. Its

[18] See the official website of the DPR. <htpps://www.dpr.gov.ng> accessed 17 December 2022.

[19] KPMG Professional Services, Nigeria's Oil and Gas Industry Brief (June, 2014) 10.

[20] R Lukeman, 'Environmental Guidelines and Standards for Petroleum Industry in Nigeria (EGASPIN). <htpps://www.drp.gov.ng/index/egaspin> accessed 10 March 2022

[21] Regulation 22 (1), Oil and Gas Pipelines Regulation

[22] Environmental Guidelines and Standards for Petroleum Industry in Nigeria (EGASPIN) <htpps://www.drp.gov.ng/index/egaspin> accessed 15 May 2022.

authority extends to the enforcement of environmental guidelines and policies, such as the National Policy on the Environment, 1999.[23]

National Oil Spills Detection and Response Agency (NOSDRA)

The Agency at the forefront of response to oil spill incidents is the National Oil Spill Detection and Response Agency (NOSDRA). Section 1 (1) states that NOSDRA is the federal agency with the statutory responsibility for preparedness, detection and response to all oil spillages in Nigeria. However, in many cases, it is observed that oil spill investigations are usually led by oil companies' personnel and NOSDRA does not initiate oil spill investigations. The agency is thus seen to be dependent on the company involved in an oil spill incident, whether it involves conveying NOSDRA staff to oil spill sites or supplying technical data about spills. Furthermore, the process of joint investigation is heavily reliant on the oil companies.[24] The NOSDRA Act went on to provide that; the Agency shall act as the lead Agency for all matters relating to oil spills response management and liaise with the other Agencies for the implementation of the Plan, as contained in the Second Schedule;[25] cooperate with an oil spiller in the determination of appropriate measures to prevent excessive damage to the environment and the communities; expeditiously consider any proposal made for response effort by the oil spiller; mobilize internal resources and also assist to obtain any outside human and financial resources that may be required to combat any oil spill; and assist in the assessment of damage caused by an oil spillage.[26] It should be noted that it is not apparent in the Act and all the functions of NOSDRA therein that NOSDRA is in anyway directly involved with clean-up or remediation of oil spill sites.

The Ministries and Agencies which the Agency shall co-opt and collaborate with in the event of a major oil spill apart from her parent Ministry, the Federal Ministry of Environment are Nigerian Institute of Oceanography and Marine Research; the Federal Ministries of Works; Health, Transport; Information; Water Resources, Agriculture and Rural Development; Communication, Aviation (NIMET); Science and Technology and Defence; the National Emergency Management Agency; the Oil producers Trade Section (OPTS) of the Lagos Chambers of Commerce; the Nigerian Police Force, State and Local Governments (involved); Non-Governmental Organizations, (NGOs) etc.[27] This agency which seeks to create zero tolerance and manage oil spill incidences was established in 2004 through the ministry of environment to administer the National Oil Spill Contingency Plan (NOSCP) in compliance with international agreements and conventions on oil pollution responses for restoration and preservation of the environment by ensuring good oil production practices with the aim of achieving sustainable development.[28]

International Maritime Organisation (IMO)

At the end of a UN Conference held in Geneva between February and March 1948, the Convention establishing the Inter-Governmental Maritime Consultative Organization (IMCO) was adopted. The name of the organization being changed to IMO in 1982 following the entry into force of the 1975 amendments to the original convention to remove the word 'Consultative' from its title. The aims of IMCO as set out in Article 1[29] of the original Convention included: provision of machinery for cooperation between Governments on all

[23] M T Ladan, 'Review of NESREA Act 2007 and Regulations 2009 - 2011: A New Dawn in Environmental Compliance and Enforcement in Nigeria' [2012] (8)(1) *Law, Environment and Development Journal*. 116.

[24] A Olaniyan, 'The Law and Multi-Agency Response to Oil Spill Incidents in Nigeria' [2015] *Interspill Amsterdam*. 211

[25] The Second Schedule laid down the functions or duties of every stakeholder Ministry or Agency (Public or private) that will be co-opted and involved in the event of a major or disastrous oil spill. Section 19(2), *ibid.* C/F this power granted NOSDRA in S. 19(2) is vested on the Federal Ministry of Petroleum Resources in the Plan – the National Oil Spill Contingency Plan at paragraph 8.2. As the Act is superior to the Plan, the provision of the Act supersedes

[26] Section 19(3), *ibid;* it is a wonder though why the need for Section 19(3) when all it contains in paragraphs a-d thereto are already provided one way or the other at times even more forcefully in Section 19(1)(a-j)? However, this issue of repetition of functions is observed through-out the entire legislation.

[27]See Second Schedule to the NOSDRA Act; it also listed their various functions as aforesaid. See also Section 19(4), *ibid.* However, one may observe that the NOSDRA Act did not stipulate how NOSDRA would elicit the cooperation and action of these Ministries and Agencies nor any penalty for non-cooperation provided in the law. N.B.: Some Ministries and Agencies given duties in the Plan as published on the NOSDRA website are not listed nor assigned duties in the NOSDRA Act. They are the Federal Ministries of Petroleum Resources, Foreign Affairs, NNPC, NPA and NMA (now NIMASA). On the other hand, the Federal Ministry of Science and Technology is listed and granted duties in the Act but is not even mentioned in the Plan.

[28] <https://www.nosdra.com> Accessed 10 May 2021.

[29]Convention on the International Maritime Organization. <http://www.imo.org/conventions/mainframe.asp?topic_id=771> accessed 10 December 2022.

aspects of the international shipping trade; encouraging the adoption of highest practicable standards for maritime safety and navigation; promoting the international shipping trade; and removing unfair restrictive practices on shipping. However, the original Convention text made no mention of marine pollution or of the environment and it was only in 1975 that Article 1 of the Convention was changed to include the aim of 'prevention and control of marine pollution from ships'.

The Convention finally entered into force in March 1959, 12 months after it was accepted by the 21st State – the terms of entry into force required signature by 21 states, of which 7 had to have a shipping industry with not less than 1,000,000 gross tonnes. Adoption of the Convention had been delayed for 11 years, much of the delay being due to some countries seeing Article 1 as being unacceptable to their national needs. During the 11 years prior to the adoption of the Convention concern about the marine environment and maritime safety continued to grow and two Conventions were adopted, the implementation of which was to become the responsibility of the IMO once it was established. These were the 1954 International Convention for Prevention of Pollution by Oil and the 1948 International Convention on Safety of Life at Sea (SOLAS). This latter Convention had originally been adopted in 1914, following the sinking of the *Titanic,* and had been subsequently been amended in 1929 and in 1948. Between entry into force in 1958 and September 2010, the IMO Convention had been amended 8 times. This was the result of increased membership necessitating increasing the size of the Council, and also as a result of the need to introduce new Committees or change the status or make-up of existing Committees, for example.

The IMO is a specialized agency of the United Nations. At June 2010 it had 169 Member States (Contracting Parties) and three Associate Members.[30] Member Governments are responsible for implementing and enforcing global regulations on safety, security and marine pollution from ships. The United Nations (1998)[31] Review of Maritime Transport notes that over 80% of world merchandise is carried by sea, amounting to some 8.02 billion tons in 2007 (Executive Summary, page xiii). This includes transport of food, oil, raw materials and manufactured goods, for example. Maritime transport is of vital importance to the global economy. The effective governance of that mode of transport - and of the seas and oceans - particularly in the areas of environment, safety and security, are also vital. The IMO plays a significant role in ensuring that international standards, Conventions and regulations are adhered to by member and non-member states. The International Maritime Organisation (IMO) in 1989 through its Maritime Safety Committee produced and adopted the offshore removal guidelines that stated clearly the obligation of coastal states in respect of offshore structures in the petroleum industry. This voluntary regime for decommissioning shows the use of soft law in directing state practice at international level.[32] The IMO guidelines state that '[a]bandoned or disused offshore installations or structures on any continental shelf or in any exclusive economic zone are required to be removed, except where non-removal or partial removal is consistent' with the guidelines and standards it goes on to set out.[33] It made variations as to what particular structures are to undergo complete or partial removal.[34] In this vein, it provides general requirement of removal, which is subject to exception permitting non-removal or partial removal so long as it is consistent with certain guidelines and standards.

5. Conclusion and Recommendations

Partial or complete removal of offshore installations from the seabed is the generally accepted rule under both global and regional instruments. The conditions under which the removal is supposed to be performed and the criteria for the exceptions however highly diverge from one treaty system to another. This remains highly problematic in light of the considerable number of installations reaching the end of their life-cycle, and of the potential environmental harm they represent. The lack of an agreed institutional framework should not necessarily consist of an obstacle to the development of a more coherent and comprehensive legal framework. As pointed out by Beckman, '[i]f the IMO is not considered to be the competent international organization for this purpose, then interested States should draft a global convention and convene a global diplomatic conference

[30]Full details of IMO Membership can be found via the IMO website. <http://www.imo.org/About/mainframe.asp?topic_id=315> accessed 8 December 2022.

[31] United Nations 'Review of Maritime Transport 2008' (2008) Pub. United Nations Conference on Trade and Development, United Nations, New York and Geneva, 2008. <http://www.unctad.org/Templates/webflyer.asp?docid=10745&intItemID=4659&lang=1&mode=downloads> accessed 10 December 2022.

[32] L Atsegbua (n 41) 285.

[33] IMO Guidelines (n 17) Paragraph 1.1.

[34] Art 3

to consider its adoption.'[35] A specialized framework treaty could be an important step for the offshore industry in general and for the treatment of decommissioned or disused installations in particular. A sustainable decommissioning practice in Nigeria will require much more than just to 'copy and paste' similar regulations borrowed from international instruments and perhaps, from other oil-producing jurisdictions for purposes of convenience without taking into consideration the technical differences in respect of the nature of installations in the industry. Furthermore, the reliance on soft law prescriptions may not entirely be helpful when it is time to consider offshore decommissioning in the industry, particularly as these soft laws are not binding on states and are merely permissible in nature.[36] Also, of great importance to this article is the consideration of sustainable decommissioning or abandonment options. On this issue, Worika opined that 'the thrust of a sustainable decommissioning or abandonment policy should seek to balance the competing interests of the various stakeholders: the oil-producing state (especially the interest of the nearest littoral community), the offshore petroleum producing company, other legitimate users of the sea (who may not be immediately ascertainable) and, perhaps, the interest of future generations.'[37]

In sum, the challenges of decommissioning offshore energy installations in the Nigerian petroleum industry may not currently appear to be an issue. But, this is bound to change in the future as deep offshore in the industry continues to attract a considerable amount of international upstream petroleum investors as a result of new discoveries. There is no doubt that offshore decommissioning in Nigeria is clearly a matter for the future, consequently; the country may not at this time be embroiled in the current legal perspectives of decommissioning programmes. However, Nigeria may not completely be out of the continuing controversy except it begins to move towards providing a robust and sustainable decommissioning governance regime in the industry as a way of preparing for the future. There is need for the following measures:

Creation of a Special Agency for Decommissioning and Abandonment

The URC is over burdened with exploration and production matters while the NNPC a joint venture partners cannot regulate itself. Therefore, there is need for a special agency or department in the Ministry of Petroleum to manage these processes as decommissioning and Abandonment of Assets have turned out to be a huge and special area in the industry requiring specialized technology, with specialized agency. The Brazilian and Norway examples are classic example as, several Government Departments or Agencies whose functions are related to the activity of Decommissioning and Abandonment came together to form a specialized committee on the development of processes and standards for handling this issues.

Enforcement of Laws

There must be imposition of heavy fines and sanctions on companies that fail to adhere strictly to legal provisions on the decommission and abandonment process and such fines and sanctions should be provided for in Nigeria's legal regime and ultimately implemented when the need arises.

Upfront Abandonment Cost

In order to avoid conflict that may arise between government and operators, an abandonment cost upfront be extracted from operators before or at the time of the grant of the licenses to the operators.

Host Community Engagement

Since most of these facilities affect the economic life of the host communities, any decommissioning or abandonment processes should involve the host communities as stake holders. It is in this way that various acts of sabotage and obstruction of decommissioning plans, would be obviated. The author hopes that if these recommendations are followed along the established bests practices, Nigeria would have prepared for a robust decommissioning law for the sustainable development of the country.

[35] R Beckman, 'Global Legal Regime on the Decommissioning of Offshore Installations and Structures', in M. Nordquist (ed), *The Regulation of Continental Shelf Development, Rethinking International Standards* (Leiden: Martinus Nijhoff 2013) 280.

[36] I L Worika, 'Towards a Sustainable Offshore Abandonment/Rehabilitation Policy in Africa: Part 1' [2000] 10 *IELTR* 235 - 240.

[37] I L Worika (n. 55)