

Ngozi Chinwa Ole

Federal University Oye Ekiti, Nigeria

ORCID: 0000-0002-6877-5086

olengozi@gmail.com

Eti Best Herbert

Bowen University, Iwo, Nigeria

ORCID: 0000-0002-2131-9278

etiherbert@gmail.com

The Nigerian Offshore Oil Risk Governance Regime: Does the Petroleum Industry Act 2021 Address the Existing Gaps?

Nigeryjski system zarządzania ryzykiem eksploatacji podmorskich złóż ropy naftowej. Czy ustawa o przemyśle naftowym z 2021 r. wypełnia istniejące luki?

ABSTRACT

The occurrence of several offshore petroleum accidents in Nigeria supports the conclusion by some authors that the Petroleum Act (PA) 1969 regime is fraught with lapses. Environmental protagonists have applauded the Petroleum Industry Act (PIA) 2021 as the way forward in the regulation of offshore risk. This paper uses the non-doctrinal methodology to investigate the extent to which the PIA 2021 has progressed beyond the PA 1969 in effectively regulating offshore risk in Nigeria's petroleum sector. Such analyses are predicated on the general principles of effective risk governance regime evidenced in international best practices. This study finds that the PIA 2021 has not successfully filled the existing gaps identified in the PA 1969 regime. It was argued that while the PIA provides for the establishment of a separate regulator, it retains the defects of the 1969 Act, including conflict of interest replete in the regulator being the regulated and the dual role of the regulator in maximizing revenue and risk governance. Another defect is the retention of a prescriptive method of regulation,

CORRESPONDENCE ADDRESS: Ngozi Chinwa Ole, PhD, Federal University Oye Ekiti, Faculty of Law, Oye-Are Road, P.M.B 373, Oye-Ekiti, Ekiti State, Nigeria; Eti Best Herbert, Research Fellow, Bowen University, Faculty of Law, P.M.B 284, Iwo, Osun State, Nigeria.

which was argued to be ineffective in regulating an ever-evolving risk environment. It is expected that such analyses will prove useful in guiding future reforms in the Nigerian petroleum sector, as well as other jurisdictions, given that risk regulation is an area of transnational law. The authors recommend the adoption of goal-setting risk governance regulation, which allows for flexibility, leaving safety in the hands of those with better expertise to guarantee it, i.e. the operator.

Keywords: risk governance; Petroleum Industry Act 2021; conflict of interest; prescriptive method of regulation; goal-setting risk governance regulation

INTRODUCTION

Nigeria heavily depends on the petroleum industry for economic subsistence, as it derives 80% of its revenue and over 90% of its exports from the sector.¹ Oil explorations are either carried out onshore or offshore. Section 318 of the Petroleum Industry Act 2021 (hereinafter: the PIA 2021), which is the interpretation section of the Act, defines onshore as the “land areas above the high-water mark, other than frontier acreages”. The said section did not supply definition for offshore. However, it provides for “deep offshore”, which is regarded as “any area within the territorial waters, continental shelf or exclusive economic zone offshore of Nigeria having a water depth in excess of 200 meters”. If deep offshore begins from the 200-meter seaward water depth, it therefore follows that offshore begins from the shorelines starting from the low water mark. The determination of the deep-offshore from 200-meter depth point may not be unconnected with the fixation of 200-meter water depth isobath as the determining point for the purpose of revenue allocation to constituent states of the federation.²

There are up to 500 oil fields within the Niger Delta region, more than 55% of which are located onshore.³ One hundred and ninety-three of the offshore facilities are in active production, while the remaining 23 have either been shut down or abandoned.⁴ In the course of operation of onshore and offshore oil field, there could be occurrence of uncontrolled hydrocarbon infusion into the oil well which could spill into the surroundings of such facility. This occurrence is technically referred to

¹ E.B. Herbert, *Legal Mechanism for Blowing the Whistle against Incidence of Tax Haven in Nigeria*, “OIDA International Journal of Sustainable Development” 2019, vol. 2(4), p. 33.

² Section 1 Allocation of Revenue (Abolition of Dichotomy in the Application of the Principle of Derivation) Act 2004. See also *AG Cross Rivers State v. AG Federation & Anor* (2012) LPELR-9335(SC), p. 49 paras. A-B.

³ National Petroleum Investment Services, *Crude Oil Reserves/Production*, <https://napims.nnpcegroup.com/Pages/Crude-Oil-Reserves-Production.aspx> (access: 10.2.2022).

⁴ *Ibidem*.

as a blowout.⁵ Although both onshore and offshore oil fields portend environmental hazards, an offshore accident has a more devastating effect considering hydrocarbon volatility and the fluidity of the offshore environment.⁶

There are various forms of risk associated with petroleum prospecting, exploration, mining, refining, and transportation, particularly for a country such as Nigeria, where the petroleum industry holds sway as the mainstay of her economy. Amongst others, the risks associated with this industry include accidental damage to offshore facilities and environmental risk.⁷ Incidence of petroleum exploration includes oil pollution, gas flaring, and other forms of environmental degradation. Hazardous risk associated with offshore oil facilities appear in the form of fire outbreak, blowout, explosion, harmful accident to personnel, structural integrity of oil facilities could also be compromised as a result.⁸

Oil pollution portends vast devastation for the environment considering the physical, and immediate impact which is visited on the flora and fauna that depends on the environment for survival.⁹ An outbreak of food poisoning is one form of biological hazard which manifests in offshore oil work platforms.¹⁰ It ultimately affects humans who depend on plants and animals to satisfy their basic needs for subsistence.

Petroleum exploration is a capital-intensive business concern associated with various categories of cost, both fiscal and field costs. Field cost constitute costs associated with exploration, development, operational, and abandonment of an onshore or offshore oil field.¹¹ Operators involved in petroleum exploration, which are mostly made up of multinational companies (MNCs), try to minimize cost and risk as much as possible to maximize profit and receive adequate return on investment. Oil companies have a diminutive incentive to put up protocol to curb offshore oil pollution risk, given the additional cost this would occasion on them and the consequential impact it would visit on their return on investment. Most

⁵ M.A. Jaculli, D. Colombo, J.R.P. Mendes, *Operational Safety Risk Assessment in Offshore Oil Wells*, Proceedings of the ASME 2019, 38th International Conference on Ocean, Offshore and Arctic Engineering, June 9–14, 2019, Glasgow.

⁶ E. Wifa, T.S. Hunter, *Mitigating Occupational Health and Safety Risks in the Proposed Australian Offshore Wind Energy Industry: Lessons from the Safety Case Regime*, "Journal of Energy & Natural Resources Law" 2022, vol. 40(1).

⁷ C.E. Mbanugoa, J.C. Eke, *Risk Analysis Applied in Oil Exploration and Production*, "Nigerian Journal of Technology" 2011, vol. 30(2), pp. 73–74.

⁸ R. Flin, K. Mearns, M. Fleming, R. Gordon, *Risk Perception and Safety in the Offshore Oil and Gas Industry*, Norwich 1996, p. 11.

⁹ J. Drimmer, *Human Rights and the Extractive Industries: Litigation and Compliance Trends*, "Journal of World Energy Law & Business" 2010, vol. 3(2), p. 124.

¹⁰ K. Niven, R. McLeod, *Offshore Industry: Management of Health Hazards in the Upstream Petroleum Industry*, "Occupational Medicine" 2009, vol. 59(5), p. 305.

¹¹ H.F. Simpah, *Risk and Uncertainty in Managing Oilfields in Nigeria*, Bachelor of Engineering Project, Baze University 2021, p. 13.

developing countries purposely downplay environmental safety standards to attract foreign investment from MNCs.¹² It, therefore, behoves sector regulators to ensure that operators comply with laid down safety measures and standards to prevent or reduce incidental offshore oil pollution risk.

In certain instances, offshore oil risk incidence presupposes absence or significant defect in regulatory safety measures set up to address such issues. This would require an examination of the provisions of the prevalent legal and regulatory regime in place during the period the accident occurred.¹³ Prior to enacting the PIA 2021, the sector was highly regulated, considering the number of statutory instruments and regulatory agencies involved. Notwithstanding the heavy regulatory presence in the industry, most studies have found the regime defective in offshore oil risk management.¹⁴ Some of those gaps include potential conflict of interest between the maximization of revenue powers of the regulator and the functions of the latter in ensuring the minimization of accidents in the offshore sector; use of prescriptive regulations in an ever-changing environment; ineffective regulatory monitoring, etc.¹⁵ The PIA 2021, which repealed the pre-existing oil sector legal regime, essentially sought to streamline the regulatory regime and fill up existing gaps in sector regulation.

In light of the above, this paper answers the research question: Has the PIA 2021 progressed beyond the Petroleum Act 1969 (hereinafter: the PA 1969) in effectively regulating offshore risk in Nigeria's petroleum sector? It argues that the PIA 2021 has not successfully filled the existing gaps identified in the PA 1969 regime. Using non-doctrinal, it predicts its analyses on the general principles of effective risk governance regime evidenced in international best practice. This study finds that the PIA 2021 has not successfully filled the existing gaps identified in the PA 1969 regime. It was argued that while the PIA 2021 provides for the establishment of a separate regulator, it retains the defects of the PA 1969, including conflict of interest replete in the regulator being the regulated and the dual role of the regulator in maximizing revenue and risk governance. Another defect is the retention of a prescriptive method

¹² R. Glicksman, R.E.A. Levy, *Collective Action Perspective on Ceiling Preemption by Federal Environmental Regulation: The Case of Global Climate Change*, "Northwestern University Law Review" 2008, vol. 102, p. 579.

¹³ K. Kaasen, *Post Piper Alpha: Some Reflections on Offshore Safety Regimes from a Norwegian Perspective*, "Journal of Energy & Natural Resources Law" 1991, vol. 9(4), p. 281.

¹⁴ I. Jumbo, N.C. Ole, *A Critical Analysis of the Nigerian Offshore Oil Risk Governance Regime (Post Macondo)*, "African Journal of International Energy and Environmental Law" 2019, vol. 3(3); P.E. Agbonifo, *Risk Management and Regulatory Failure in the Oil and Gas Industry in Nigeria: Reflections on the Impact of Environmental Degradation in the Niger Delta Region*, "Journal of Sustainable Development" 2016, vol. 9(4); A. Ambituuni, J. Amezaga, J. Emeseh, *Analysis of Safety and Environmental Regulations for Downstream Petroleum Industry Operations in Nigeria: Problems and Prospects*, "Environmental Development" 2014, vol. 9, p. 52.

¹⁵ F.A. Ogwu, S. Badamasuiy, C. Joseph, *Environmental Risk Assessment of Petroleum Industry in Nigeria*, "International Journal of Scientific Research and Innovative Technology" 2015, vol. 2(4), p. 69.

of regulation, which was argued to be ineffective in regulating an ever-evolving risk environment. It is expected that such analyses will prove useful in guiding future reforms in the Nigerian petroleum sector, as well as other jurisdictions, given that risk regulation is an area of transnational law. The authors recommend the adoption of goal-setting risk governance regulation, which allows for flexibility, leaving safety in the hands of those with better expertise to guarantee it, i.e. the operator.

METHODOLOGY

The non-doctrinal methodology, otherwise known as “socio-legal” is mostly used in this paper.¹⁶ It is a methodology that combines doctrinal methodology with social tools with the aim of connecting analysis of law to the broader societal context wherein it applies.¹⁷ Doctrinal methodology employs logic and legal precedent to “analyze a legal doctrine, rule, principle or concept to see whether it matches with the hitherto judicial statements and to suggest a new set of statements or principles if the existing ones (...) do not match”.¹⁸ The downside of doctrinal methodology is that it treats an issue as purely legal, thereby isolating it from the context wherein it exists.¹⁹ On the contrary, the non-doctrinal methodology combines doctrinal with sociological tools especially empirical or theories emanating from empirical studies to proffer legal solutions to an existing problem.²⁰ It is founded on the presumption that law is an instrument of social engineering, given that it aims to steer the behavior of a targetted group to achieve set objectives.²¹

The paper investigates the extent to which the PIA 2021 has progressed beyond the PA 1969 in effectively regulating risk governance. To the extent that there is an analysis of statutes i.e., the PIA 2021 and the PA 1969, the doctrinal methodology is used. However, the underlying problem is the behavior of offshore petroleum personnel when managing risk. It is the latter that the law purports to shape in order to prevent and minimize petroleum risk-related accidents. To the extent that this work investigates the use of law in the societal context of offshore risk

¹⁶ D.O. Donovan, *Socio-Legal Methodology: Conceptual Underpinnings, Justifications and Practical Pitfalls*, [in:] *Legal Research Methods: Principles and Practicalities*, eds. L. Cahillane, J. Schweppe, Dublin 2016, p. 31.

¹⁷ T. Hutchinson, *The Doctrinal Method: Incorporating Interdisciplinary Methods in Reforming the Law*, “Erasmus Law Review” 2015, vol. 3, p. 130.

¹⁸ K. Vibhute, F. Aynalem, *Legal Research Methods*, 2007, <https://chilot.files.wordpress.com/2011/06/legal-research-methods.pdf> (access: 25.2.2022), p. 43.

¹⁹ P.I. Bhat, *Doctrinal Legal Research as a Means of Synthesizing Facts, Thoughts, and Legal Principles*, [in:] *Idea and Method of Legal Research*, ed. P.I. Bhat, Oxford 2020.

²⁰ N. Malhotra, *A Critical Analysis of Underlying Concepts of Doctrinal Research*, “International Journal of Legal Developments and Allied Issues” 2021, vol. 8(1), p. 77.

²¹ K. Vibhute, F. Aynalem, *op. cit.*

management, social tools are combined with the doctrinal methodology to tie law to its broader context. It is for this reason that the study is non-doctrinal research. Notably, while this paper does not use empirical tools, it relies on results derived from such empirical research as detailed in scholarly articles.

In addition, K. Vibhute and F. Aynalem opine that non-doctrinal methodology is used when the question involves any or all of the following, “(i) Are laws and legal institutions serving the needs of society? (...) (iv) Are laws properly administered and enforced or do they exist only in statute books? (v) What are the factors, if any, responsible for poor or non-implementation of the laws? (...) (vii) For whose benefit a law is enacted, and are they using it? Have the intended ‘legislative targets’ benefited from the law? If not, for what reasons? Where do ‘bottlenecks’ lie?”²² This paper analyses the adequacy or otherwise of the relevant statutes in managing risks in the offshore petroleum sector. It includes a discussion of factors responsible for poor implementation, such as the capacity deficiencies of the regulator. Thus, it falls within the orbit of non-doctrinal research.

OFFSHORE OIL RISK RELATED ACCIDENTS IN NIGERIA

Risk is the potential unwanted or negative occurrence associated with an act or course of an event, which could take the form of loss or damage.²³ Situating risk in offshore oil exploration, risk connotes a negative implication on the environment. Offshore environmental risks manifest in the form of oil spillage, explosion, fire outbreak, or emission of substances that are hazardous to humans, the sea environment and other living things that gain life sustenance from the sea. According to National Petroleum Investment Services (NAPIMS) Report, pipeline and tanker corrosion is about 50% causative factor for oil pollution.²⁴ While sabotage and oil production process both account for 28% and 21% cause of oil pollution, respectively, the leftover 1% is accredited to inferior and non-functional oil production facilities.²⁵

The Piper Alpha and Macondo disaster are two incidents of well-documented offshore oil accidents that attracted global concerns. The Piper Alpha explosion occurred in the United Kingdom in 1988, while the Macondo accident occurred due to spillage from an oil platform in the Deepwater horizon around the Gulf of Mexico in 2010. Without trying to diminish the graveness of those accidents, Ni-

²² *Ibidem*, p. 87.

²³ T. Zuofa, E.G. Ochieng, *Issues in Risk Management: The Perspectives of Managers in Nigeria's Oil and Gas Industry*, “International Journal of Engineering Research & Technology” 2014, vol. 3(4), p. 369.

²⁴ National Petroleum Investment Services, *op. cit.*

²⁵ *Ibidem*.

geria has experienced far greater incidents of oil spillages both in numerical terms, degree, fiscal and environmental consequences. The challenge is that the Nigerian experience does not get publicity from the press and scholars as much as that of her foreign counterparts. However, this work shall identify some of those incidences.

Offshore oil risk disaster has occurred as far as petroleum exploration began in Nigeria. A documentation by the Federal Ministry of Petroleum Resources reveals 2,676 instances of oil spillage between the period of 1976 and 1990.²⁶ According to the National Oil Spill Detection and Response Agency (NOSDRA), beginning from 1976 to 1996, over 2.4 million barrels of crude oil was spilled into the environment. The Ministry of Environment review, which covers the period of 2015 to March 2021, reveals that 4,919 incidences, approximating 235,206 barrels of oil spillage occurred, thereby infamously conferring on Nigeria the booby prize for oil risk governance in the world.²⁷ In 2021 alone, there were 307 documented incidences of major, medium, and minor spillages, spewing out 11,116.391 barrels of oil unto the land, inland waters, swamp, shoreline, and the open sea.²⁸ The spillages of the preceding two years were more devastating, with 21,291.673 barrels and 42,076.492 barrels discharged into the environment in 2020 and 2019 respectively.²⁹

Specific instances of offshore oil pollution accidents are herein captured accordingly. On 1 May 2010, an ExxonMobil oil pipeline situated in Otuegwe local community of Akwa Ibom ruptured and spilled over one million gallons of oil into the environment, unabated for over seven days, thereby leaving thick balls of tar flowing through the coastline.³⁰ On 20 December 2011, an accident occurred in the Shell Bonga oil field, which lies 1,000 meters water deep within a 60 km² area, thereby leading to a spillage of more than 40,000 barrels of oil. More than 20 coastal communities spanning across Bayelsa, Delta and Akwa Ibom States were affected by the spill.³¹ On 29 June 2014, from the ExxonMobil owned offshore facility located in Ibeno, Akwa Ibom State, about 30,000 barrels of oil escaped into the mangroves and coastline of the area.³²

²⁶ A.O. Odukoya, *Oil and Sustainable Development in Nigeria: A Case Study of the Niger Delta*, "Journal of Human Ecology" 2006, vol. 20(4), p. 255.

²⁷ *Nigeria Records 4,919 Oil Spills in 6 years, 4.5trn Barrels Stolen in 4 Years – Minister*, 6.7.2021, <https://www.premiumtimesng.com/news/headlines/471901-nigeria-records-4919-oil-spills-in-6-years-4-5trn-barrels-stolen-in-4-years-minister.html> (access: 10.2.2022).

²⁸ NOSDRA, *Nigerian Oil Spill Monitor*, <https://nosdra.oilspillmonitor.ng> (access: 10.2.2022).

²⁹ S. Obasi, *Nigeria Loses 21,300 Barrels of Oil to Spill – NOSDRA*, 13.7.2021, <https://www.vanguardngr.com/2021/07/nigeria-losses-21300-barrels-of-oil-to-spill-nosdra/amp> (access: 10.2.2022).

³⁰ *Nigeria's Agony Dwarfs the Gulf Oil Spill: The US and Europe Ignore It*, 29.5.2010, <https://www.theguardian.com/world/2010/may/30/oil-spills-nigeria-niger-delta-shell> (access: 10.2.2022).

³¹ G.U. Ojo, M. Obaseki, *Shell Bonga Oil Spill*, Nigeria, May 4, 2019.

³² *Massive Nigerian Oil Spill Goes Unreported*, https://www.stakeholderdemocracy.org/massive-nigerian-oil-spill-goes-unreported/?gclid=-EDQ6hSBoCDDgQAvD_BwE (access: 31.1.2022).

As a result of wellhead leakage, OML 29 Well 1 platform located in Yena-goa, Bayelsa State and jointly operated by Nigerian National Petroleum Corporation (NNPC)/Aiteo Eastern E&P, continually discharged crude oil for more than a month.³³ As of 29 November 2021, it was reported that technicians were seen working on the site despite the “high-pressure stream of brownish liquid spraying” unabated into Nembe coastline connected to the Santa Barbara River, flowing through the Niger Delta before its eventual destination into the Atlantic Ocean.³⁴ There is a controversy regarding the date the incident occurred. It is officially reported to have occurred on 5 November 2021, whereas eyewitnesses said the accident started on 1 November 2021.³⁵ In January 2020, the Ejalawa community, through a representative action, sued NNPC and two of its joint venture partners operating an oil platform located within their community, which caused an 18 September 2019 oil spillage in their community.³⁶

The latest incidence of offshore oil spillage is the Shebah Exploration & Production Co Ltd. owned offshore oil platform known as FPSO Trinity Spirit, located at Ukpokiti terminal, which on 2 February 2022 was rocked by an explosion and engulfed in fire, leading to the fatality of ten persons. The cause of the explosion of the vessel, which has a processing and storage capacity of 22,000 and 2 million barrels per day, respectively, is yet to be identified.³⁷ The foregoing instances of offshore oil pollution presuppose the need for effective oil risk governance. In the words of I. Jumbo and N.C. Ole, “the resultant effect of the defects in the identified legal framework for risk governance is offshore risk related accidents”.³⁸

³³ E. Egbejule, *Niger Delta Residents Protest against Month-Long Oil Spill*. *Al Jazeera Media Network*, 7.12.2021, <https://www.aljazeera.com/news/2021/12/7/niger-delta-youths-protest-against-month-long-oil-spill> (access: 31.1.2022).

³⁴ *Niger Delta Communities in “Great Danger” as Month-old Oil Spill Continues*, 6.12.2021, <https://news.mongabay.com/2021/12/niger-delta-communities-in-great-danger-as-month-old-oil-spill-continues> (access: 31.1.2022).

³⁵ T.H. Adebayo, *Investigation: Aiteo, Nigerian Regulators Misreported Nembe Oil Spill That Caused Severe Environmental Damage*, 31.12.2021 <https://www.premiumtimesng.com/news/headlines/503406-investigation-aiteo-nigerian-regulators-misreported-nembe-oil-spill-that-caused-severe-environmental-damage.html> (access: 31.1.2022).

³⁶ J. Kingsley, *Oil Spills Hit 14m Litres as Shell’s N800b Judgment Upsets Industry*, 22.12.2021, <https://guardian.ng/news/oil-spills-hit-14m-litres-as-shells-n800b-judgment-upsets-industry> (access: 31.1.2022).

³⁷ F. Asu, *Explosion Rocks Niger Delta Old Vessel, 10 Crew Members on Board*, 3.2.2022, <https://www.google.com/amp/s/punchng.com/10-missing-as-sepcols-oil-production-vessel-explodes-in-niger-delts/%3famp> (access: 10.2.2022).

³⁸ I. Jumbo, N.C. Ole, *op. cit.*, p. 15.

REGULATORY APPROACH TO OFFSHORE OIL RISK GOVERNANCE

The predominant approaches to regulating health, safety, and environmental protection are prescriptive and goal-setting. The prescriptive approach is where a government uses regulation as an interventionist tool to detail out the steps in every aspect of risk governance in the petroleum sector.³⁹ While it was the foundation of risk governance regulation,⁴⁰ it has become heavily criticised as being inadequate.⁴¹

The quick evolutionary pace of risk in the sector has made it impossible for regulation to catch up with it, even with frequent reviews.⁴² Among other things, it does not leave room for innovative responses to risk, even when the prescriptive rules may be the best option in a given circumstance.⁴³ For instance, a factor that escalated the severity of the damages occasioned by the Piper Alpha Accident in the United Kingdom is the sheepish compliance with the emergency response procedure. A standby boat-like vessel was the prescribed method of excavation which was rendered ineffective by the nature of the accident.⁴⁴ According to the Cullen Report, the Offshore Installation Manager complied strictly with the regulations but “took no initiative in an attempt to save life”.⁴⁵

The prescriptive approach presupposes a technically competent regulatory body with the ability to monitor, evaluate and ensure compliance of operators with risk regulatory prescriptions.⁴⁶ The regrettable defect of such a regulator-designated prescriptive method is that state officials do not always have the expertise to regulate safety in comparison to the industry itself efficiently.⁴⁷ Notable accidents in the global petroleum sector, such as the Deep Water Horizon Accident, are reported to be caused partly by the use of the prescriptive method of regulation.⁴⁸

³⁹ R.L. Glicksman, *Regulatory Blowout: How Regulatory Failures Made the BP Disaster Possible, and How the System Can Be Fixed to Avoid a Recurrence*, GW Law Faculty Publications & Other Works, Paper 608, 2010, http://scholarship.law.gwu.edu/faculty_publications/608 (access: 22.1.2022).

⁴⁰ J. Paterson, *Health and Safety at Work Offshore*, [in:] *UK Oil and Gas: Current Practice and Emerging Trends*, eds. G. Gordon, J. Paterson, E. Usenmez, Edinburgh 2011, p. 187.

⁴¹ C. Wolfson, J. Foster, M. Beck, *Paying for the Piper: Capital and Labour in UK'S Offshore Oil Industry*, New York 2013, pp. 283–297.

⁴² J. Paterson, *Health and Safety at Work...*

⁴³ *Ibidem*.

⁴⁴ The fire explosions made it impossible for the offshore oil workers to get on board the emergency rescue platform. The appropriate response would have been an emergency aircraft. See *ibidem*.

⁴⁵ Lord Cullen, *The Public Inquiry into the Piper Alpha Disaster*, “Cm 1310, 1990”, para 8.35.

⁴⁶ L.G. Williams, *Nuclear Safety and Nuclear Security Regulatory Challenges Facing a Country Embarking on a Nuclear Power Programme*, “Journal of World Energy Law and Business” 2018, p. 7.

⁴⁷ D.E. Omukoro, *Environmental Degradation in Nigeria: Regulatory Agencies, Conflict of Interest and the Use of Unfettered Discretion*, “Oil, Gas and Energy Law Journal” 2017, p. 17.

⁴⁸ C. Carrigan, *Captured by Disaster: Reinterpreting Regulatory Behaviour in the Shadow of the Gulf Oil Spill*, [in:] *Preventing Regulatory Capture: Special Interest Influence and How to Limit It*, eds. D. Carpenter, D.A. Moss, Cambridge 2014, p. 240.

On the other hand, the goal-setting method has become the preferred risk governance regime in the sector. In the words of R. Akumperigya, it entails “negotiations between the state and individual firms so as to establish regulations that are particular to the needs of the firm”.⁴⁹ In practice, the government communicates its objectives on risk governance to players in the sector; the latter adopts measures peculiar to its environment to attain such goals. The justification for the goal-setting method is that it makes up for the defects of the prescriptive method of regulation. It imposes the responsibility of risk identification, assessment, prevention, and mitigation strategy on the operator, who is the creator.⁵⁰ It also gives room for flexibility and responsiveness to the peculiarity of the risk environment of individual platforms.⁵¹

The latter obviates the lapse and inability of the prescriptive method of regulation to keep up with the changing dynamics of the offshore environment.⁵² Akumperigya caps it all by opining that “the classic approach to regulation in which government stipulates what must be done to prevent health, safety and environmental harm is yielding to approaches that confer regulated firms some degree of discretion”.⁵³ While the goal-setting regulatory approach is growing in popularity as a preferred method of regulation, the Nigerian petroleum sector is still stuck with prescriptive method of regulation.

THE PETROLEUM ACT 1969 REGIME

Prior to the enactment of the PIA in 2021, the PA 1969 was the major law that governed the entire spectrum of petroleum operations, including health, safety, and environment. It provides for the power of the Minister of Petroleum to issue variant forms of petroleum licenses⁵⁴ and make risk governance regulations.⁵⁵

⁴⁹ R. Akumperigya, *Licensing or Safety: The Regulatory Dilemma of the Ghana Petroleum Commission*, Aberdeen 2015, pp. 36–37.

⁵⁰ J. Paterson, *Health, Safety and Environmental Regulation on the United Kingdom Continental Shelf in the Aftermath of the Macondo Disaster*, “LSU Journal of Energy Law and Resources” 2016, vol. 4(2), p. 263.

⁵¹ *Ibidem*.

⁵² R. Baldwin, M. Cave, *Understanding Regulation: Theory, Strategy and Practice*, Oxford 1999, cited after R. Akumperigya, *op. cit.*, p. 38.

⁵³ I. Ayres, J. Braithwaite, *Responsive Regulation*, Oxford 1992.

⁵⁴ Petroleum Act, Cap P10, 2004, s.2. See also M.B. Umar, *Legal Issues in the Management of Nigeria's Production Sharing Contracts from a Study of the Nigerian National Petroleum Corporation's (National Petroleum Management Services') Perspective*, “Oil and Gas Energy Law” 2005, vol. 3(1), p. 16.

⁵⁵ Petroleum Act, Cap P10, 2004, s.9. See also M.K. Amakoromo, G.A. Agbaitoro, *Reforming the Regulatory Framework for Offshore Health and Safety in the Nigerian Oil and Gas Industry: Lessons from the United Kingdom*, “Oil and Gas Energy Law Journal” 2016, vol. 14(4), p. 6.

Pursuant to the latter provision, several regulations relevant to risk governance were made, including the Petroleum (Drilling and Production) Regulations 1969 and the Mineral Oils (Safety) Regulations and Petroleum (Drilling and Production) Regulations 1969.⁵⁶ Some of its obligation on health, safety, and environmental protection include the requirement for licensees to adopt practicable precautions to prevent pollution, as detailed in specific standards, including the Environmental Guidelines and Standards for the Petroleum Industry in Nigeria (EGASPIN).⁵⁷ It also provides an obligation on the licensee to maintain their apparatus in good condition and repair.⁵⁸ There is also a general obligation on the licensee to mandatorily comply with instructions and guidelines issued from time to time by the regulator.⁵⁹ The PA 1969 further provides that “the Minister may by writing under his hand delegate to another person any power conferred on him by or under this Act, except the power to make orders and regulations”.⁶⁰ The delegated authority for this purpose is the Department of Petroleum Resources (DPR).⁶¹

The aforementioned risk governance regime has been dismissed as defective in several respects. It is trite that “you cannot, by prescriptive rules, regulate risk governance in an offshore oil environment that is constantly changing and differs from one platform to another”.⁶² The Nigerian risk governance regime being prescriptive fits into the latter nomenclature. What is more, its inadequacy is exacerbated by the gross incompetency of the regulator. D.E. Omukoro writes that the “DPR was recently found to lack the technical or financial resources to effectively carry out its duties”.⁶³

Another lapse is the problem of conflict of interest in several respects.⁶⁴ The DPR was a merger of the state oil company, NNPC, and the Ministry of Petroleum.⁶⁵ Thus, the DPR was unable to objectively discharge its risk regulatory functions, to the extent that NNPC is privy to most of the grant instruments as regulated in the sector.⁶⁶ It was also responsible for licensing of petroleum operations.⁶⁷ Given the interest of the government in making the most out of petroleum, there was a natural

⁵⁶ A. Ambituuni, J. Amezaga, E. Emeseh, *op. cit.*, pp. 43–60.

⁵⁷ S.W. Amaduobogha, *The Legal Regime for Petroleum Activities in Nigeria*, [in:] *Regulation of the Upstream in Petroleum Sector: A Comparative Study of Licensing and Concession Systems*, ed. T. Hunter, Cambridge 2015, p. 282.

⁵⁸ Petroleum (Drilling and Production) Regulations 1969, Reg 25.

⁵⁹ *Ibidem*, Reg 45.

⁶⁰ Section 12 (1) of the PA 1969.

⁶¹ P.E. Agbonifo, *op. cit.*, p. 3. See also F.A. Ogwu, S. Badamasuiy, C. Joseph, *op. cit.*, p. 69.

⁶² Lord Cullen, *op. cit.*, para 21.42.

⁶³ D.E. Omukoro, *op. cit.*, p. 17.

⁶⁴ A. Ambituuni, J. Amezaga, E. Emeseh, *op. cit.*

⁶⁵ I. Jumbo, N.C. Ole, *op. cit.*, p. 15.

⁶⁶ M.B. Umar, *op. cit.*, p. 16.

⁶⁷ I. Jumbo, N.C. Ole, *op. cit.*, p. 15.

tendency for the DPR to have conflicted interest in its role as the regulator of risk governance.⁶⁸ Apart from DPR, there were other sector regulators, such as National Environmental Standards and Regulations Enforcement Agency and NOSDRA, government ministries, departments, and agencies, whose regulatory functions often overlap with each other.⁶⁹

It is against this background that the PIA 2021 was adopted. The latter has been applauded as having the capacity to introduce positive changes in the risk governance regime in the petroleum sector.⁷⁰ The next section contains a detailed analysis of whether the PIA 2021 is a progression of the PA 1969 regime in risk governance.

THE PETROLEUM INDUSTRY ACT 2021

The PIA was enacted in 2021 after over two decades since the Oil and Gas Implementation Committee was inaugurated in 2000 to overhaul the legal regime of the oil and gas industry.⁷¹ The PIA is a radical piece of legislation because it has the effect of repealing not less than 15 pre-existing petroleum legislations⁷² while consolidating them into a one-stop shop regulation. The overhaul of petroleum legislations was long overdue, considering the obvious weaknesses, including inadequacy in risk governance, which have been identified in the preceding section of this work. The PIA is anticipated to engineer environmental remediation and change the narratives in the area of risk governance.⁷³ Some of the key features of the PIA, in the context of risk governance, is its objective in establishing independent institutions with clear roles in the sector.

Against the above background, it created the Nigerian Upstream Regulatory Commission (NURC)⁷⁴ and Nigerian Mid-Stream and Downstream Petroleum Regulatory Authority (NMDPRA)⁷⁵ as the regulators in the sector. The NURC is to promote health, safety, and environmental protection in offshore oil exploration.⁷⁶

⁶⁸ *Ibidem*.

⁶⁹ A. Ambituuni, J. Amezaga, E. Emeseh, *op. cit.*, p. 53.

⁷⁰ S. Bhadare, *Nigeria Petroleum Industry Act brings Positive Change*, 2021, <https://iclg.com/alb/17110-nigeria-petroleum-industry-act-brings-positive-change> (access: 16.2.2022).

⁷¹ O. Okafor, *Environmental Laws and Factors Affecting them in Nigeria: Case Study of Gas Flaring Laws in Niger Delta*, Thesis Report, Wageningen University 2011, p. 34.

⁷² Sections 310 and 311 (9) of the PIA 2021.

⁷³ K. Nwuke, *Nigeria's Petroleum Industry Act: Addressing Old Problems, Creating New Ones*, 2021, <https://www.brookings.edu/blog/africa-in-focus/2021/11/24/nigerias-petroleum-industry-act-addressing-old-problems-creating-new-ones> (access: 17.2.2022).

⁷⁴ Section 4 of the PIA 2021.

⁷⁵ Section 29 of the PIA 2021.

⁷⁶ Sections 6, 7 and 8 of the PIA 2021.

They also have the power to make regulations for this purpose.⁷⁷ The NURC has the responsibility to enforce laws, regulations, policies, and standards in every spectrum of upstream operations, including oil risk governance.⁷⁸ The provisions of the PIA 2021 will be analysed in the context of whether it is a progression of the PA 1969 and ancillary regulations.

1. Objectives

The PIA 2021 provides that it aims to “create efficient and effective governing institutions with clear and separate roles for the petroleum industry”.⁷⁹ It was argued that a lack of clear and separate roles for the various bodies involved impedes the effectiveness of the risk governance regime.⁸⁰ Such conflict is further aggravated by the conflicting roles of the DPR in licensing and risk governance.⁸¹ Thus, the aforementioned provision in the PIA arguably, communicates a commitment by the government to end issues of overlapping roles and conflicting interests in the previous regime. It is anticipated that the clear objective will birth measures aimed at achieving it.⁸² Regrettably, the PIA does not provide any definite objective to minimize risk in the petroleum sector through the guaranteeing of health, safety, and environmental protection. On the other hand, it aims to achieve “a commercially driven and profit oriented national petroleum company”⁸³ and create “a business environment conducive for petroleum operations”.⁸⁴ The latter connotes that revenue maximization assumes the front burner in comparison to health, safety, and environmental protection. Thus, the regulator may likely compromise effective risk governance regulation where it is perceived that it will hinder maximization of revenue from the sector.

2. NURC and conflict of interest

The PIA 2021 provides for the establishment of the NURC and the Nigeria Mid-stream and Downstream Petroleum Regulatory Authority. The former has the general mandate to regulate the entire spectrum of upstream activities, including operational, technical, and commercial activities.⁸⁵ It has the power to “promote healthy, safe,

⁷⁷ *Ibidem*.

⁷⁸ Section 7 (a) of the PIA 2021.

⁷⁹ Section 2 of the PIA 2021.

⁸⁰ P.E. Agbonifo, *op. cit.*, p. 1.

⁸¹ M.K. Amakoromo, G.A. Agbaitoro, *op. cit.*, p. 6.

⁸² V. Sonntag-O’Brien, E. Ushe, *Mobilising Finance for Renewable Energies*, “Oil and Gas Energy Law” 2004, vol. 2, p. 3.

⁸³ Section 2 of the PIA 2021.

⁸⁴ *Ibidem*.

⁸⁵ Section 6 (a) of the PIA 2021.

efficient and effective conduct of upstream petroleum operations in an environmentally acceptable and sustainable manner”.⁸⁶ The PIA provides that it shall be a body corporate with the membership of its board drawn from several quarters, including a representative from the Ministry of Petroleum not below the rank of a director.⁸⁷ As reiterated, the DPR was solely composed of members from the state oil company – NNPC on the one hand and the Ministry of Petroleum on the other.

It is to be noted that the NNPC and the Ministry of Petroleum are operators which representative of the federal government’s interest in the sector. They carry out joint ventures, joint operations and share profit with multi-national companies operating within the industry. The effect is that it has creates a potential conflict of interest, in the sense that, the regulated was also the regulator. The NURC is expected to be a progression, given that its membership should not be primarily a union of the regulated and regulator, which undermines effective risk governance.

However, the effectiveness of this provision in addressing the problem of conflict of interest is whittled down by the transfer of DPR’s rights, interests, obligations, assets, and liabilities to the NURC. The PIA provides that NURC “shall be vested with all assets, funds, resources, moveable and immovable properties which immediately before the effective date were held by the Petroleum Inspectorate or the Department of Petroleum Resources (DPR)”.⁸⁸ In the same vein, it confers on NURC “the rights, interests, obligations, and liabilities of the Petroleum Inspectorate and Department of Petroleum Resources existing immediately before the effective date”.⁸⁹ Given the wide scope of this takeover, it is not surprising that the DPR has simply changed its name to NURC.⁹⁰ Thus, NURC is structurally, functionally, and intrinsically the same as DPR.⁹¹ The implication is that the regulatory capture and conflict of interest challenge identified with DPR in the previous legal regime will still affect NURC. This could be interpreted as the proverbial “putting of old wine in new skin”.

The point has been made that the NURC has the power to regulate risk in the offshore petroleum industry. In the same vein, they also have the responsibility to ensure “that upstream operations are carried out in a manner as to minimize waste and achieve optimal government revenues”.⁹² Furtherance to the latter, they have the powers to issue various permits and specific licenses for upstream petroleum activities.⁹³ The PIA is silent on how the NURC will strike the right balance between revenue maximization and risk governance. As such, it is a prerogative

⁸⁶ Section 6 (d) of the PIA 2021.

⁸⁷ Section 4 of the PIA 2021.

⁸⁸ Section 312 (1) of the PIA 2021.

⁸⁹ Section 312 (2) of the PIA 2021.

⁹⁰ NURC, *About*, 2021, <https://www.nuprc.gov.ng/index.php> (access: 18.2.2022).

⁹¹ *Ibidem*.

⁹² Section 6 (c) of the PIA 2021. For emphasis, an expanded font was used.

⁹³ Section 7 (d) of the PIA 2021.

of NURC to determine the direction of such balance. Importantly, petroleum is the mainstay of Nigeria's economy, constituting about 90% of its gross earnings.⁹⁴ This fact, coupled with the objective of the PIA to maximize revenue generation in the sector, will imply that NURC would likely prioritize revenue maximization over and above risk governance. The latter is very similar to the defects of DPR, which also had the dual responsibility of maximizing revenue and regulating risk.

Historic antecedents have shown that conferring on one body the responsibility of maximizing revenue while regulating risk governance undermines effectiveness in the latter responsibility. The US Deepwater Horizon case, reputed to be the worst offshore oil accident,⁹⁵ was attributed to be caused partly by the dual role of the regulator in maximizing revenue and regulating risk.⁹⁶ In the words of H.G. Robertson, "leasing, enforcement and revenue collection were conflicting interests, because the agency, which was working to bring more revenue into U.S. government coffers, would not have the incentive to make sound leasing or enforcement decisions that might conflict with its revenue-raising goals".⁹⁷ As such, the dual role of NURC will undermine an effective risk governance regime. The reason is that once implementing risk governance entails more cost and invariably less revenue for government, the regulator will likely compromise. One instance where this could occur is in the case of a Production Sharing Agreement where the contractor will deduct the expenses made as cost oil. As such, having a robust risk governance would mean more cost oil and less revenue for the Nigerian government. The NURC, in the light of its mandate of maximizing revenue generation, would likely tow the path of compromising safety at the expense of effective risk regulation.

3. NURC and retention of prescriptive regulations

The point has been made that NURC has the duty to ensure strict compliance with risk governance regulations, policies, and laws. While section 310 (1) of the PIA 2021 repeals a plethora of laws and regulations,⁹⁸ the PA 1969 has been rendered subsisting and applicable until existing oil prospecting licences and oil

⁹⁴ M. Ibelema, *Might 2022 be the year Nigeria takes another Economic Leap?*, 2021, <https://punchng.com/might-2022-be-the-year-nigeria-takes-another-economic-leap> (access: 19.2.2022).

⁹⁵ C. Robertson, C. Krauss, *Gulf Spill is the Largest of its kind*, 2.8.2010, <https://www.nytimes.com/2010/08/03/us/03spill.html> (access: 19.2.2022).

⁹⁶ J. Ray, *Offshore Safety and Environmental Regimes: A Post-Macondo Comparative Analysis of the United States and the United Kingdom*, "Mississippi College Law Review" 2014, vol. 33(11), p. 11. See also T. Hunter, *The BP Oil Spill and Australia... Is There a Connection?*, "The National Legal Eagle" 2010, vol. 16(2), p. 3.

⁹⁷ H.G. Robertson, *Applying Some Lessons from the Gulf Oil Spill to Hydraulic Fracturing*, "Case Western Reserve Law Review" 2013, vol. 63(4), p. 1286.

⁹⁸ Some of the laws amended include the Nigerian National Petroleum Act 1977, Petroleum Products Pricing Regulatory Agency Act 2003, and Associate Gas Reinjection Act 1979, etc.

mining leases become expired or terminated.⁹⁹ In addition to that, the PIA provides that “any act, subsidiary legislation or regulation or guideline, directive and order made under subsidiary legislation repealed or amended by the Act, shall in so far as it is not inconsistent with this Act, continue in force (...) as if it was issued by the Commission...until revoked or replaced by an amendment to this Act or by subsidiary legislation made under this Act”.¹⁰⁰ The implication is that the Mineral Oils (Safety) Regulations, Petroleum (Drilling and Production) Regulations 1969, EGASPIN, and other regulations on offshore oil risk governance are still applicable and in force amidst the myriad imperfections contained therein, which have been pointed out in the foregoing section of this work. NURC has the responsibility to apply the prescriptive method contained in those regulations. The requirement for these regulations not to be inconsistent with the PIA 2021 could have formed a basis for their non-implementation assuming the PIA 2021 had expressly adopted the goal-setting method of regulation.

On another hand, given the powers of NURC to make regulations in the sector, there is still slim chance that it may revoke or repeal the regulations made under the Petroleum Act 1969 in favour of the goal-setting approach. Regardless, there is no definite provision that mandates the NURC to certainly adopt another regulation which will make for goal-setting method of risk governance. There is also no obligation imposed on them to certainly amend the Mineral Oils (Safety) Regulations, Petroleum (Drilling and Production) Regulations 1969, EGASPIN, and other regulations. As reiterated, the NURC is simply DPR renamed. Having the same institution responsible for regulating safety, makes it highly unlikely that the prescriptive method of regulation will be jettisoned in favour of goal-setting method.

In conclusion, while the PIA 2021 purports to establish a separate institution for regulating the upstream petroleum sector, it has retained all the notable defects of PA 1969. Among other things, the regulated is still the regulator, as NURC is simply a renamed DPR. NURC is still belaboured under the conflicting weight of its dual role of maximizing revenue generation and regulating risk. The retention of the extant regulations made under the PA 1969 implies the continuity of the prescriptive method of regulation, even when it is not an effective method of regulation.

CONCLUSIONS

Despite the well-known shortcomings of the offshore risk governance framework in the PA 1969, the PIA 2021 had not adequately addressed the existing gaps identified in the PA 1969 regime. For one, it retained the defects of the PA 1969

⁹⁹ Section 310 (1) of the PIA 2021.

¹⁰⁰ Section 311 (1) of the PIA 2021.

regime. In a previous study, it was suggested that the Act should impose the burden of developing a “safety management system where they would assess potential risks and adopt appropriate measures to prevent offshore disaster”.¹⁰¹ However, it appears that this counsel was not heeded, thereby still maintaining the prescriptive regulatory approach, instead of the recommended goal-setting approach.

There is a need for a regulatory requirement for operators to create a safety management system for each offshore oil platform in order to guarantee maximum safety while ensuring minimum disruption to petroleum exploration operations. The services of competent experts can be employed as inspectors to ensure compliance with safety standards and quantitative risk assessment projections,¹⁰² instead of NURC merely inheriting the employees of DPR who were found technically wanting in this regard. The need to create an independent regulator that would be at arm’s length¹⁰³ away from other influencer stakeholders in the sector, such as the minister, NNPC, MNCs, etc., cannot be overemphasized.

However, the NURC, which has recently been constituted in January 2022,¹⁰⁴ has the best chance of providing the much-needed regulatory reforms by reviewing the offshore oil risk governance regime in order to remove the identified flaws. There is a need for them to repeal existing regulations in this regard and create new regulations that are given to goal-setting regulatory measures in line with global drive. The recent FPSO Trinity Spirit offshore oil rig explosion in Ukpokiti terminal, Nigeria, in early February 2022, only reemphasizes the urgency and alacrity required of NURC in acting in this regard.¹⁰⁵ Until this is done, only then can it be said that the PIA 2021 has truly heralded the much-needed reforms in oil risk governance in Nigeria.

¹⁰¹ I. Jumbo, N.C. Ole, *op. cit.*, p. 24.

¹⁰² R.W. Bentham, *The United Kingdom Offshore Safety Regime: Before and After Piper Alpha*, “Journal of Energy & Natural Resources Law” 1991, vol. 9(4), p. 279.

¹⁰³ D.S. Olawuyi, Z. Tubodenyefa, *Review of the Environmental Guidelines and Standards for the Petroleum Industry in Nigeria (EGASPIN)*, https://www.iucn.org/sites/dev/files/content/documents/2019/review_of_the_environmental_guidelines_and_standards_for_the_petroleum_industry_in_nigeria.pdf (access: 4.2.2022).

¹⁰⁴ E. Gupte, A. Ghosh, *Nigerian Govt. Starts Implementing New Oil Reform Law, in Bid to Boost Output in 2022*, 5.1.2022, <https://www.spglobal.com/platts/en/market-insights/latest-news/oil/010522-nigerian-govt-starts-implementing-new-oil-reform-law-in-bid-to-boost-output-in-2022> (access: 14.2.2022).

¹⁰⁵ B. Lepic, *Watch: FPSO Catches Fire and Sinks Offshore Nigeria*, 2022, https://www.rigzone.com/news/watch_fpso_catches_fire_and_sinks_offshore_nigeria_03-feb-2022-167794-article (access: 22.2.2022).

REFERENCES

Literature

- Agbonifo P.E., *Risk Management and Regulatory Failure in the Oil and Gas Industry in Nigeria: Reflections on the Impact of Environmental Degradation in the Niger Delta Region*, "Journal of Sustainable Development" 2016, vol. 9(4), DOI: <https://doi.org/10.5539/jsd.v9n4p1>.
- Akumperigya R., *Licensing or Safety: The Regulatory Dilemma of the Ghana Petroleum Commission*, Aberdeen 2015.
- Amaduobogha S.W., *The Legal Regime for Petroleum Activities in Nigeria*, [in:] *Regulation of the Upstream in Petroleum Sector: A Comparative Study of Licensing and Concession Systems*, ed. T. Hunter, Cambridge 2015.
- Amakoromo M.K., Agbaitoro G.A., *Reforming the Regulatory Framework for Offshore Health and Safety in the Nigerian Oil and Gas Industry: Lessons from the United Kingdom*, "Oil and Gas Energy Law Journal" 2016, vol. 14(4).
- Ambituuni A., Amezaga J., Emeseh E., *Analysis of Safety and Environmental Regulations for Downstream Petroleum Industry Operations in Nigeria: Problems and Prospects*, "Environmental Development" 2014, vol. 9, DOI: <https://doi.org/10.1016/j.envdev.2013.12.002>.
- Ayres I., Braithwaite J., *Responsive Regulation*, Oxford 1992.
- Baldwin R., Cave M., *Understanding Regulation: Theory, Strategy and Practice*, Oxford 1999.
- Bentham R.W., *The United Kingdom Offshore Safety Regime: Before and After Piper Alpha*, "Journal of Energy & Natural Resources Law" 1991, vol. 9(4), DOI: <https://doi.org/10.1080/02646811.1991.11433727>.
- Bhat P.I., *Doctrinal Legal Research as a Means of Synthesizing Facts, Thoughts, and Legal Principles*, [in:] *Idea and Method of Legal Research*, ed. P.I. Bhat, Oxford 2020, DOI: <https://doi.org/10.1093/oso/9780199493098.001.0001>.
- Carrigan C., *Captured by Disaster: Reinterpreting Regulatory Behaviour in the Shadow of the Gulf Oil Spill*, [in:] *Preventing Regulatory Capture: Special Interest Influence and How to Limit It*, eds. D. Carpenter, D.A. Moss, Cambridge 2014, DOI: <https://doi.org/10.1017/CBO9781139565875.015>.
- Donovan D.O., *Socio-Legal Methodology: Conceptual Underpinnings, Justifications and Practical Pitfalls*, [in:] *Legal Research Methods: Principles and Practicalities*, eds. L. Cahillane, J. Schweppe, Dublin 2016.
- Dimmer J., *Human Rights and the Extractive Industries: Litigation and Compliance Trends*, "Journal of World Energy Law & Business" 2010, vol. 3(2), DOI: <https://doi.org/10.1093/jwelb/jwq001>.
- Flin R., Mearns K., Fleming M., Gordon R., *Risk Perception and Safety in the Offshore Oil and Gas Industry*, Norwich 1996, DOI: <https://doi.org/10.2118/35907-MS>.
- Glicksman R., Levy R.E.A., *Collective Action Perspective on Ceiling Preemption by Federal Environmental Regulation: The Case of Global Climate Change*, "Northwestern University Law Review" 2008, vol. 102.
- Herbert E.B., *Legal Mechanism for Blowing the Whistle against Incidence of Tax Haven in Nigeria*, "OIDA International Journal of Sustainable Development" 2019, vol. 2(4).
- Hunter T., *The BP Oil Spill and Australia... Is There a Connection?*, "The National Legal Eagle" 2010, vol. 16(2).
- Hutchinson T., *The Doctrinal Method: Incorporating Interdisciplinary Methods in Reforming the Law*, "Erasmus Law Review" 2015, vol. 3, DOI: <https://doi.org/10.5553/ELR.000055>.
- Jaculli M.A., Colombo D., Mendes J.R.P., *Operational Safety Risk Assessment in Offshore Oil Wells*, Proceedings of the ASME 2019, 38th International Conference on Ocean, Offshore and Arctic Engineering, June 9–14, 2019, Glasgow, DOI: <https://doi.org/10.1115/OMAE2019-95069>.

- Jumbo I., Ole N.C., *A Critical Analysis of the Nigerian Offshore Oil Risk Governance Regime (Post Macondo)*, "African Journal of International Energy and Environmental Law" 2019, vol. 3(3).
- Kaasen K., *Post Piper Alpha: Some Reflections on Offshore Safety Regimes from a Norwegian Perspective*, "Journal of Energy & Natural Resources Law" 1991, vol. 9(4),
DOI: <https://doi.org/10.1080/02646811.1991.11433728>.
- Lord Cullen, *The Public Inquiry into the Piper Alpha Disaster*, "Cm 1310, 1990".
- Malhotra N., *A Critical Analysis of Underlying Concepts of Doctrinal Research*, "International Journal of Legal Developments and Allied Issues" 2021, vol. 8(1).
- Mbanugoa C.E., Eke J.C., *Risk Analysis Applied in Oil Exploration and Production*, "Nigerian Journal of Technology" 2011, vol. 30(2).
- Niven K., McLeod R., *Offshore Industry: Management of Health Hazards in the Upstream Petroleum Industry*, "Occupational Medicine" 2009, vol. 59(5),
DOI: <https://doi.org/10.1093/occmed/kqp076>.
- Odukoya A.O., *Oil and Sustainable Development in Nigeria: A Case Study of the Niger Delta*, "Journal of Human Ecology" 2006, vol. 20(4),
DOI: <https://doi.org/10.1080/09709274.2006.11905936>.
- Ogwu F.A., Badamasuiy S., Joseph C., *Environmental Risk Assessment of Petroleum Industry in Nigeria*, "International Journal of Scientific Research and Innovative Technology" 2015, vol. 2(4).
- Ojo G.U., Obaseki M., *Shell Bonga Oil Spill*, Nigeria, May 4, 2019.
- Okafor O., *Environmental Laws and Factors Affecting them in Nigeria: Case Study of Gas Flaring Laws in Niger Delta*, Thesis Report, Wageningen University 2011.
- Omukoro D.E., *Environmental Degradation in Nigeria: Regulatory Agencies, Conflict of Interest and the Use of Unfettered Discretion*, "Oil, Gas and Energy Law Journal" 2017.
- Paterson J., *Health and Safety at Work Offshore*, [in:] *UK Oil and Gas: Current Practice and Emerging Trends*, eds. G. Gordon, J. Paterson, E. Usenmez, Edinburgh 2011,
DOI: <https://doi.org/10.3366/edinburgh/9781845861018.003.0008>.
- Paterson J., *Health, Safety and Environmental Regulation on the United Kingdom Continental Shelf in the Aftermath of the Macondo Disaster*, "LSU Journal of Energy Law and Resources" 2016, vol. 4(2).
- Ray J., *Offshore Safety and Environmental Regimes: A Post-Macondo Comparative Analysis of the United States and the United Kingdom*, "Mississippi College Law Review" 2014, vol. 33(11),
DOI: <https://doi.org/10.2139/ssrn.2370709>.
- Robertson H.G., *Applying Some Lessons from the Gulf Oil Spill to Hydraulic Fracturing*, "Case Western Reserve Law Review" 2013, vol. 63(4).
- Simpah H.F., *Risk and Uncertainty in Managing Oilfields in Nigeria*, Bachelor of Engineering Project, Baze University 2021.
- Sonntag-O'Brien V., Ushe E., *Mobilising Finance for Renewable Energies*, "Oil and Gas Energy Law" 2004, vol. 2.
- Umar M.B., *Legal Issues in the Management of Nigeria's Production Sharing Contracts from a Study of the Nigerian National Petroleum Corporation's (National Petroleum Management Services') Perspective*, "Oil and Gas Energy Law" 2005, vol. 3(1).
- Wifa E., Hunter T.S., *Mitigating Occupational Health and Safety Risks in the Proposed Australian Offshore Wind Energy Industry: Lessons from the Safety Case Regime*, "Journal of Energy & Natural Resources Law" 2022, vol. 40(1), **DOI: <https://doi.org/10.1080/02646811.2021.1879547>**.
- Williams L.G., *Nuclear Safety and Nuclear Security Regulatory Challenges Facing a Country Embarking on a Nuclear Power Programme*, "Journal of World Energy Law and Business" 2018.
- Wolfson C., Foster J., Beck M., *Paying for the Piper: Capital and Labour in UK'S Offshore Oil Industry*, New York 2013, **DOI: <https://doi.org/10.4324/9781315040318>**.
- Zuofa T., Ochieng E.G., *Issues in Risk Management: The Perspectives of Managers in Nigeria's Oil and Gas Industry*, "International Journal of Engineering Research & Technology" 2014, vol. 3(4),
DOI: <https://doi.org/10.2139/ssrn.3105982>.

Online sources

- Adebayo T.-H., *Investigation: Aiteo, Nigerian Regulators Misreported Nembe Oil Spill That Caused Severe Environmental Damage*, 31.12.2021 <https://www.premiumtimesng.com/news/headlines/503406-investigation-aiteo-nigerian-regulators-misreported-nembe-oil-spill-that-caused-severe-environmental-damage.html> (access: 31.1.2022).
- Asu F., *Explosion Rocks Niger Delta Old Vessel, 10 Crew Members on Board*, 3.2.2022, <https://www.google.com/amp/s/punchng.com/10-missing-as-sepcols-oil-production-vessel-explodes-in-niger-delta-%3famp> (access: 10.2.2022).
- Bhadare S., *Nigeria Petroleum Industry Act brings Positive Change*, 2021, <https://iclg.com/alb/171110-nigeria-petroleum-industry-act-brings-positive-change> (access: 16.2.2022).
- Egbejule E., *Niger Delta Residents Protest against Month-Long Oil Spill. Al Jazeera Media Network*, 7.12.2021, <https://www.aljazeera.com/news/2021/12/7/niger-delta-youths-protest-against-month-long-oil-spill> (access: 31.1.2022).
- Glicksman R.L., *Regulatory Blowout: How Regulatory Failures Made the BP Disaster Possible, and How the System Can Be Fixed to Avoid a Recurrence*, GW Law Faculty Publications & Other Works, Paper 608, 2010, http://scholarship.law.gwu.edu/faculty_publications/608 (access: 22.1.2022).
- Gupte E., Ghosh A., *Nigerian Govt. Starts Implementing New Oil Reform Law, in Bid to Boost Output in 2022*, 5.1.2022, <https://www.spglobal.com/platts/en/market-insights/latest-news/oil/010522-nigerian-govt-starts-implementing-new-oil-reform-law-in-bid-to-boost-output-in-2022> (access: 14.2.2022).
- Ibelema M., *Might 2022 be the year Nigeria takes another Economic Leap?*, 2021, <https://punchng.com/might-2022-be-the-year-nigeria-takes-another-economic-leap> (access: 19.2.2022).
- Kingsley J., *Oil Spills Hit 14m Litres as Shell's N800b Judgment Upsets Industry*, 22.12.2021, <https://guardian.ng/news/oil-spills-hit-14m-litres-as-shells-n800b-judgment-upsets-industry> (access: 31.1.2022).
- Lepic B., *Watch: FPSO Catches Fire and Sinks Offshore Nigeria*, 2022, https://www.rigzone.com/news/watch_fpso_catches_fire_and_sinks_offshore_nigeria_03-feb-2022-167794-article (access: 22.2.2022).
- Massive Nigerian Oil Spill Goes Unreported*, https://www.stakeholderdemocracy.org/massive-nigerian-oil-spill-goes-unreported/?gclid=-EDQ6hSB0CDdgQAvD_BwE (access: 31.1.2022).
- National Petroleum Investment Services, *Crude Oil Reserves/Production*, <https://napims.nnpcgroup.com/Pages/Crude-Oil-Reserves-Production.aspx> (access: 10.2.2022).
- Niger Delta Communities in "Great Danger" as Month-old Oil Spill Continues*, 6.12.2021, <https://news.mongabay.com/2021/12/niger-delta-communities-in-great-danger-as-month-old-oil-spill-continues> (access: 31.1.2022).
- Nigeria Records 4,919 Oil Spills in 6 years, 4.5trn Barrels Stolen in 4 Years – Minister*, 6.7.2021, <https://www.premiumtimesng.com/news/headlines/471901-nigeria-records-4919-oil-spills-in-6-years-4-5trn-barrels-stolen-in-4-years-minister.html> (access: 10.2.2022).
- Nigeria's Agony Dwarfs the Gulf Oil Spill: The US and Europe Ignore It*, 29.5.2010, <https://www.theguardian.com/world/2010/may/30/oil-spills-nigeria-niger-delta-shell> (access: 10.2.2022).
- NOSDRA, *Nigerian Oil Spill Monitor*, <https://nosdra.oilspillmonitor.ng> (access: 10.2.2022).
- NURC, *About*, 2021, <https://www.nuprc.gov.ng/index.php> (access: 18.2.2022).
- Nwuke K., *Nigeria's Petroleum Industry Act: Addressing Old Problems, Creating New Ones*, 2021, <https://www.brookings.edu/blog/africa-in-focus/2021/11/24/nigerias-petroleum-industry-act-addressing-old-problems-creating-new-ones> (access: 17.2.2022).
- Obasi S., *Nigeria Loses 21,300 Barrels of Oil to Spill – NOSDRA*, 13.7.2021, <https://www.vanguardngr.com/2021/07/nigeria-losses-21300-barrels-of-oil-to-spill-nosdra/> (access: 10.2.2022).

Olawuyi D.S., Tubodenyefa Z., *Review of the Environmental Guidelines and Standards for the Petroleum Industry in Nigeria (EGASPIN)*, https://www.iucn.org/sites/dev/files/content/documents/2019/review_of_the_environmental_guidelines_and_standards_for_the_petroleum_industry_in_nigeria.pdf (access: 4.2.2022).

Robertson C., Krauss C., *Gulf Spill is the Largest of its kind*, 2.8.2010, <https://www.nytimes.com/2010/08/03/us/03spill.html> (access: 19.2.2022).

Vibhute K., Aynalem F., *Legal Research Methods*, 2007, <https://chilot.files.wordpress.com/2011/06/legal-research-methods.pdf> (access: 25.2.2022).

Legal acts

Allocation of Revenue (Abolition of Dichotomy in the Application of the Principle of Derivation) Act 2004.

Associate Gas Reinjection Act 1979.

Environmental Guidelines and Standards for the Petroleum Industry in Nigeria.

Nigerian National Petroleum Act 1977.

Petroleum Act 1969.

Petroleum Act 2004.

Petroleum Industry Act 2021.

Petroleum Products Pricing Regulatory Agency Act 2003.

Petroleum (Drilling and Production) Regulations 1969.

ABSTRAKT

Wystąpienie szeregu wypadków związanych z wydobywaniem ropy naftowej ze złóż podziemnych w Nigerii jest potwierdzeniem wniosków niektórych autorów, że reżim ustawy naftowej z 1969 r. (*Petroleum Act*, PA) jest obciążony wieloma wadami. Obróńcy środowiska z zadowoleniem przyjęli ustawę o przemyśle naftowym z 2021 r. (*Petroleum Industry Act*, PIA) jako krok naprzód w regulacji ryzyka związanego z wydobywaniem ropy ze złóż podziemnych. W artykule wykorzystano niedoktrynalną metodologię badania zakresu, w jakim PIA 2021 wyszła poza PA 1969 w skutecznej regulacji ryzyka działalności wydobywczej *offshore* w nigeryjskim sektorze naftowym. Takie analizy opierają się na ogólnych zasadach efektywnego systemu zarządzania ryzykiem, znajdujących potwierdzenie w najlepszych praktykach międzynarodowych. W opracowaniu zauważono, że PIA 2021 nie wypełniła skutecznie luk stwierdzonych w reżimie opartym na PA 1969. Wskazywano, że wprawdzie PIA przewiduje powołanie odrębnego regulatora, pozostawia jednak wady PA 1969, w tym wielość konfliktów interesów polegających na tożsamości regulatora oraz regulowanego i dwójnego charakteru zadań regulatora jako podmiotu maksymalizującego zysk i zarządzającego ryzykiem. Inną wadą jest zachowanie preskryptywnej metody regulacji, która jest oceniana jako nieskuteczna przy regulacji zmieniającego się środowiska ryzyka. Oczekuje się, że takie analizy okażą się użyteczne przy opracowywaniu przyszłych reform nigeryjskiego sektora naftowego oraz innych obszarów, zważywszy na to, że regulacja w zakresie ryzyka jest dziedziną prawa transnarodowego. Autorzy zalecają przyjęcie regulacji opartej na wyznaczeniu celów zarządzania ryzykiem, co daje elastyczność, przy pozostawieniu bezpieczeństwa w rękach podmiotu dysponującego lepszą wiedzą specjalistyczną, czyli operatora.

Słowa kluczowe: zarządzanie ryzykiem; ustawa o przemyśle naftowym z 2021 r.; konflikt interesów; preskryptywna metoda regulacji; regulacja oparta na wyznaczeniu celów zarządzania ryzykiem