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Disappearing Acts – Toward a Global Civil Liability Regime for Pollution Damage Resulting from Offshore Oil and Gas Exploration

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ABSTRACT

Civil liability for pollution damage is recognized and firmly established under international law. However, there is no global international treaty that addresses this issue with respect to offshore oil and gas exploration. This may be due partly to the infrequency of the occurrence of offshore oil well blowouts. However, offshore operations represent a constant threat to the marine environment since the risk of a blowout leading to an ecological disaster is ever present. The trend has been the adoption of regional agreements to tackle the issue. However, most of the regional arrangements deal with the issue in a sidelong manner and they lack worldwide application. The case is made that a global treaty on the subject is long overdue.

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Dedicated to Phinna Agoe-Sowah – simply inspirational!

Introduction

Covering 72 per cent of the earth's total surface area and with a total volume of 140 million square kilometers,[1] the oceans represent a vast resource for the sustenance of humankind. The sea is a channel of trade and commerce, a source of hydrocarbons from which we get the most coveted source of energy – oil. For slightly over a century now petroleum products have been the answer to the energy requirements of the world. Though it began later than onshore oil exploration, offshore oil and gas exploration is today as prevalent as the former and it is said to represent nearly a third of the world's hydrocarbon liquid production.[2]

The use of the oceans by the oil industry for production and transportation of petroleum products present grave environmental challenges owing to the risk of pollution from oil spills. The environmental carnage in the marine environment resulting from oil spills from the *Torrey Canyon* (1967), *Argo Merchant* (1976), *Amoco Cadiz* (1978), *Exxon Valdez* (1989), and the *Sea Empress* (1996), makes a strong case for the adoption of effective pollution prevention measures.

At present, there exist countless international agreements dealing with marine pollution prevention. Yet "[w]hile the primary aim of the international law relating to marine

[1] Oceans and Law of the Sea, online: United Nations: Division for Oceans Affairs and the Law of the Sea <http://www.un.org/Depts/los/index.htm>

[2] HOSSEIN ESMAELI, THE LEGAL REGIME OF OFFSHORE OIL RIGS IN INTERNATIONAL LAW 12 (Aldershot: Dartmouth Publishing Co., 2001)[ESMAEILI, OFFSHORE OIL RIGS].

pollution should be to prevent such pollution, a subsidiary aim should be to facilitate the bringing of compensation claims by those who have suffered damage where pollution has occurred."[3] The *ex post facto* concerns are equally as important as the *ex ante* considerations.

The shipping industry, for instance, has been the subject of global international agreements that address the issue of civil liability for damage arising from oil spills from ships. There is, however, a distinct lack of a comprehensive and binding global instrument that addresses this subject in relation to offshore oil and gas exploration. Several rules are scattered in various international agreements but there is no uniformity and definitiveness in their tenor. Even where these factors are present, the rules lack worldwide application.

One reason which probably accounts for this state of affairs is the fact that there are very few cases of oil rig blowout incidents at sea compared to tanker accidents,[4] and the "chances of a technical blow-out are known to be remote, thanks to the technological achievements of recent years."[5] However, the "chance of a catastrophic blowout always exist"[6] because offshore operations present a constant risk of environmental pollution.[7] Whatever the case may be, the risk of a tanker spill and a well blowout is the "same since

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[3] R.R. CHURCHILL AND A.V. LOWE, THE LAW OF THE SEA 358 (Manchester: Manchester University Press, 1999)[CHURCHILL AND LOWE, THE LAW OF THE SEA].
[4] Bernard A. Dubais, *The 1976 London Convention on Civil Liability for Oil Pollution Damage from Offshore Operations*, 9 J. MAR. L. & COM. 61 (1997)[Dubais, *The 1976 London Convention*].
[5] *Ibid.* at 65.
[6] ESMAEILI, OFFSHORE OIL RIGS, *supra* note 2 at 146.
[7] John Warren Kindt, *The Law of the Sea: Offshore Installations and Marine Pollution*, 12 PEPP. L. REV. 381 (1985). Indeed, oil rig blow-outs at sea are not unknown. About 35 catastrophic blow-outs occurred between 1955-1981 – see DOUGLAS BRUBAKER, MARINE POLLUTION AND INTERNATIONAL LAW 38-40 (London and Florida: Belhaven Press, 1993).

[they result] from the action of the same polluting material (oil) introduced into the same natural environment (the sea)."[8]

A second probable reason for the lack of a concrete global instrument on the subject is the fact that offshore operations mostly take place on the continental shelf and therefore fall under the direct jurisdiction of individual states under the maritime zones regime of the Law of the Sea Convention.[9] National laws therefore, regulate such operations. The trend since the 1970s has been the adoption of several regional conventions which attempt to deal with the subject because as one author observes,

> …great geographical differences between various regions make efforts towards global cooperation both extremely complicated and unnecessary. As the presence of oil rigs and assorted platforms seems to be most evident in coastal waters the pollution problems they cause are better tackled by regional agreements that take into account the different conditions of any particular area.[10]

Yet it is intriguing that the "great geographical differences" did not prevent or make it unnecessary to adopt the LOSC to regulate the entirety of the oceans. Whatever be the virtue in piecemeal regulation in this area, it is this writer's conviction that there is an urgent need for the harmonization of international law rules with the aim of establishing a binding and uniform civil liability regime with global reach for pollution damage resulting from offshore operations. This will engender predictability of the limits of liability.

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[8] Bernard A. Dubais*, Compensation for Oil Pollution Damage Resulting from Exploration and Exploitation of Hydrocarbons in the Seabed*, 6 J. MAR. L. & COM. 549, 553 (1975) [Dubais, *Compensation*].
[9] United Nations Convention on the Law of the Sea, (10 December 1982), 1883 U.N.T.S. 397 [Hereafter referred to as LOSC].
[10] MARIA GAVOUNELI, POLLUTION FROM OFFSHORE INSTALLATIONS (London/Dordrecht/Boston: Kluwer Academic Publishers Group, 1995) 39 [GAVOUNELI, POLLUTION].

It is prudent also to stress that despite the division of the sea into regions, the various segments possess physical and geomorphologic unity. The oceans do not exist mutually exclusive of each other. The sea is one big collection of water with the exception of the so-called closed seas. The divisions are imaginary and they find their explanation in convenience. Pollution in one area will seep into the other regardless of our imaginary boundaries.

Transboundary pollution may erode any efforts at regulation in the area which suffers the damage. "In other words, the resources of the [sea] constitute one proprietary *unity* in a physical sense"[11] and "[i]n spite of the common but highly deceptive practice of dividing the world ocean into a discreet set of "seven seas"… all the world's seas are in reality part of a single interconnected world ocean…"[12] The high seas and other areas beyond the limits of national jurisdiction become even more vulnerable to the deleterious effects of pollution in the absence of a global instrument on civil liability.

This paper examines the present state of the civil liability and compensation regime under international law for pollution damage resulting from offshore exploration for oil and gas. The case is made that the scattered international law rules regulating this area should be harmonized into a single and binding international convention with global reach. The interests of both the industry and claimants will be better served when the rules are defined, identifiable, concrete, determinative and binding.

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[11] David Dzidzornu, *Marine Pollution Control: The Evolving International Law*, 2 AUSTRALASIAN J. OF NATURAL RESOURCES L. & POL'Y 111, 122 (1995) [original emphasis].
[12] Charles E. Pirtle, *Military Uses of Ocean Space and the Law of the Sea in the New Millennium*, 31 OCEAN DEVEL. & INT'L L. 7, 21 (2000).

This paper is divided into five parts. Part I takes a brief look at the impact of oil spills and other polluting substances relating to offshore operations on the marine environment. Part II is an analysis of the customary international law position on civil liability for marine pollution. Part III examines the international treaty law on the subject. Part IV is an excursion through existing regional arrangements that attempt to deal with the subject, especially under the UNEP Regional Seas Programme.[13] Part V is an attempt to assimilate civil liability rules in the shipping industry to offshore operations.

Part I – Oil and Other Matter in the Ocean

Though "it is easier in the case of offshore exploration to take necessary precautions to avoid an accident or to limit its effects even before undertaking the drilling of a well",[14] in reality offshore exploration exerts a heavy pollution toll on the marine environment. Article 1(4) of the LOSC defines pollution as:

> the introduction by man, directly or indirectly, of substances or energy into the marine environment, including estuaries, which results or is likely to result in such deleterious effects as harm to living resources and marine life, hazards to human health, hindrance to marine activities, including fishing and other legitimate uses of the sea, impairment of quality for use of sea water and reduction of amenities.

From seismic survey, to exploration and appraisal, through development and production to abandonment of rigs and wells, the industry introduces pollutants into the marine

[13] The UNEP Regional Seas Programme is made up of more than 140 coastal states participating in 13 regional programmes designed to address the accelerating degradation of the world's oceans and coastal areas – Regional Seas Programme, online: United Nations Environment Programme <http://www.unep.ch/regionalseas/home/over.htm>

[14] Dubais, Compensation, supra note 8 at 551.

environment.[15] Pollution from offshore operations may be deliberate or accidental.[16] It may result from "blow-outs (i.e. the escape of oil or gas resulting from the loss of control over the flow from a well); rupture of a pipeline; a collision between a ship and an installation; an accident while a tanker is being loaded from an installation; or destruction of a suspended well-head or sub-sea completion system";[17] operational discharges; and the dumping of oil rigs at sea.

It is said that "oil remains the main marine pollution problem [especially] due to the fact that human ingenuity has not so far perfected any reasonable method of removing oil from water."[18] Oil in the marine environment exerts negative biological (lethal, sub-lethal, physical smothering, and tainting of sea foods) effects and adverse ecological impact on the shorelines, open waters, the seabed, wetlands, corals, fisheries and coastal amenities.[19]

It is also maintained that the deleterious effects of operational discharges are minimal.[20] Nevertheless, the major emission – produced water – "does have a higher salinity and temperature [than seawater] which can modify the species composition in the vicinity of the outfall."[21]

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[15] Zhiguo Gao, *Environmental Regulation of Oil and Gas in the Twentieth Century and Beyond: An Introduction and Overview* in ZHIGUO GAO, ED., ENVIRONMENTAL REGULATION OF OIL AND GAS 3, 5 (London: Kluwer Law International Ltd., 1998).
[16] CHURCHILL AND LOWE, THE LAW OF THE SEA, *supra* note 3 at 371.
[17] *Ibid.*
[18] EDGAR GOLD, GARD HANDBOOK ON MARINE POLLUTION, 2nd ed., 293 (Arendal: Gard, 1998).
[19] *Ibid.*
[20] H. Pickering, *A New Era for the Offshore Oil and Gas Industry on the UKCS*, 23 MARINE POLICY 329, 338 (1999).
[21] *Ibid.* at 377.

The decommissioning and dumping of offshore installations also raise environmental concerns. Disposal options include leaving them in place; finding alternative uses for them; moving them to shore for recycling or using them to create artificial reefs.[22] Dumping the structures in the sea or leaving them in place "is hazardous to the environment because of the potential pollution from the accumulation of contaminated drill cuttings at the base of the platforms or from the materials and substances on board."[23]

From the foregoing, it is clear that pollution damage from offshore operations is real and cannot be over-emphasized. We will now turn our attention to civil liability for pollution damage under customary international law.

Part II – International Custom

According to article 38(1) of the Statute of the International Court of Justice, the sources of international law include "international custom, as evidenced of a general practice accepted as law." It has been expressed that "the identification of customary law always has been, and remains, particularly problematical, requiring the exercise of skill, judgment, and considerable research."[24]

However, with respect to civil liability for pollution damage it may safely be said that at customary law, the rule is *sic utere tuo ut alienum non laedas* – one must use his own so

[22] ESMAEILI, OFFSHORE OIL RIGS, *supra* note 2 at 192-195.
[23] *Ibid.* at 193.
[24] P.W. BIRNIE AND A.E. BOYLE, INTERNATIONAL LAW AND THE ENVIRONMENT 15 (Oxford and New York: Clarendon Press and Oxford University Press, 1992).

as not to damage that of another. This rule finds its reason in common sense. Its international law origin appears to be the *Trail Smelter Arbitration*[25] where it was held that "no State has the right to use or permit the use of its territory in such a manner as to cause injury…in or to the territory of another or the properties of the persons therein." Similar conclusions were reached in the later decisions in the *Corfu Channel*,[26] *Lake Lanoux*[27] and *Nuclear Tests* cases.[28]

Although the cases cited do not directly address pollution damage resulting from offshore operations, their reasoning can be reasonably stretched to cover such activities since they establish the general principle of state responsibility for transboundary pollution. This is so as long as states retain jurisdiction over offshore operations in their coastal waters. The general principle may also be extended to "apply to incidents which arise outside the territory of the defendant state, but where the wrongdoer is nonetheless subject to the defendant state's jurisdiction."[29]

It is also instructive to recall the admonishing of the United Nations Conference on the Human Environment (UNCHE).[30] While recognizing the sovereign right of states to exploit their natural resources, Principle 21 of UNCHE enjoins states to ensure that activities within their jurisdiction or control do not cause damage to the environment of

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[25] Trail Smelter Arbitration (United States v. Canada), (1931-1941), 3 R.I.A.A. 1905.
[26] Corfu Channel Case (United Kingdom v. Albania) I.C.J. Reports 1949, p.4 at p.22.
[27] Lake Lanoux Arbitration (France v. Spain), (1957) 12 R.I.A.A. 281.
[28] Nuclear Tests Cases (Australia v. France) (New Zealand v. France). See also the ILC Draft Articles on State Responsibility – International Law Commission, Draft Articles on International Liability for Injurious Consequences Arising out of Acts Not Prohibited by International Law (Prevention of Transboundary Harm from Hazardous Activities), Report of the International Law Commission, GAOR, 56th Sess., Supp. No. 10, U.N. Doc A/56/10, chp. V.E.I.
[29] Barney T. Levantino, *Protection of the High Seas from Operational Oil Pollution: A Proposal*, 6 FORDHAM INT'L L. J. 72, 92 (1982).
[30] United Nations Conference on the Human Environment, (5-16 June 1972), 11 I.L.M. 1416.

other states or of areas beyond the limits of national jurisdiction. More importantly, Principle 22 of UNCHE calls on states to cooperate for the development of liability and compensation regimes for victims of pollution and other environmental damage caused by activities within their jurisdiction or control of such states to areas beyond their jurisdiction.

We may also call into play the recent Rio Declaration.[31] Principles 2 and 13 stress Principles 21 and 22 of UNCHE respectively. Principle 16 then goes on to underline the polluter-pays principle which requires that the cost of pollution is to be borne by the polluter "with due regard to the public interest and without distorting international trade and investment."

Closely related to and based upon the *sic utere tuo* doctrine is the principle of good neighbourliness. Article 74 of the UN Charter provides that:

> Members of the United Nations also agree in their policy in respect of the territories to which this Chapter applies, no less than in respect of their metropolitan areas, must be based on the general principle of good neighbourliness, due account being taken of the interests and well-being of the rest of the world, in social, economic, and commercial matters.

Although this section applies to non-governing territories, the principle expressed therein is germane to our purpose. Indeed, a good neighbour is the one who does not injure his neighbour through the activities under his control. Any contrary view would be an invitation to international lawlessness and against the principle of abuse of right.[32]

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[31] Rio Declaration on Environment and Development, (June 1992), 31 I.L.M. 874.
[32] See Article 300 of the LOSC.

Notwithstanding these identifiable principles under customary international law, they are deliberative and merely declaratory of general principles recognizing civil liability for pollution. The principles set no standards and procedures for determining the limits of liability. In particular, the *sic utere tuo* doctrine "is too uncertain to provide a precise obligation upon states to prevent marine pollution … because it lacks any indication with respect to compensation for environmental damage."[33] We will next examine the international treaty law position.

Part III – Global Conventions

a) The Regime

The *sic utere tuo* and good neighbourliness principles have found express recognition under international treaty law. Almost every international environmental law instrument incorporates these principles in their provisions. The following is an examination of the relevant global treaties.

i) The 1958 Geneva Conventions

The first United Nations Conference on the Law of the Sea sought to establish a global regulatory regime for the marine environment with modest success. The conference adopted four conventions. However, only two of the conventions are relevant here.[34] The Continental Shelf Convention vests in the coastal state sovereign rights over the

[33] ESMAEILI, OFFSHORE OIL RIGS, *supra* note 2 at 151.
[34] These are Convention on the Continental Shelf, 29 April 1958, 449 U.N.T.S. 311 [hereafter cited as the Continental Shelf Convention]; and the Convention on the High Seas, 29 April 1958, 559 U.N.T.S. 285 [hereafter cited as the High Seas Convention].

continental shelf for the purpose of exploration and exploitation of its resources,[35] including the right to construct and maintain or operate installations necessary for such purpose.[36] However, such activities must not unjustifiably interfere with navigation, fishing or the conservation of the living resources of the sea.[37] In addition, disused or abandoned installations must be entirely removed.[38] Beyond these provisions, no attempt whatsoever is made to address the question of liability for pollution damage.

The High Seas Convention urges states to cooperate to draw regulations and measures to prevent pollution on the high seas. The closest this convention comes to the issue of liability for pollution damage is Article 28, which mandates states to take necessary legislative measures to ensure that owners of a pipeline beneath the high seas bear the cost of the destruction of other pipelines.

ii) LOSC

The LOSC, which supersedes the 1958 Conventions, seeks to settle all issues relating to the law of the sea. A general obligation is placed upon states to protect and preserve the environment in relation to offshore operations in line with the *sic utere tuo* principle.[39] The preventive obligations are carried further by urging states to cooperate on a global basis and, as appropriate, on a regional basis for the protection and preservation of the marine environment generally and in particular with respect to offshore operations.[40]

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[35] Article 2(1).
[36] Article 5(2).
[37] Article 5(1).
[38] Article 5(5).
[39] Articles 192, 193, 194, and 195.
[40] Articles 197 and 208.

On the seabed and ocean floor beyond the limits of national jurisdiction, states have the responsibility to ensure that activities therein are carried out in conformity with the provisions of the LOSC.[41] Damage caused by default of responsibility entails liability. However, a state is not liable for damage caused by a person it has sponsored if the state in question has taken all necessary and appropriate measures to secure effective compliance.[42]

Annex III of the LOSC also contains detailed rules on the basic conditions of prospecting, exploration and exploitation of the ocean floor and seabed beyond the limits of national jurisdiction. Article 22 of Annex III in particular holds a contractor liable for any damage arising from a wrongful act in the conduct of its operations. The extent of liability is stated to be the actual amount of damage.

iii) Oil Pollution Preparedness and Response Convention (OPRC)[43]

As the name suggests, the OPRC is designed to rally states to prepare for and effectively respond to oil pollution incidents. It is largely geared toward the establishment of efficient global and regional reporting systems to arrest in time the deleterious effects of oil pollution whenever and wherever they occur. It, therefore, mandates states to require operators of offshore units under their jurisdiction to have oil pollution emergency plans.[44]

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[41] Articles 139(1) and 145.
[42] Article 139(2).
[43] International Convention on Oil Pollution Preparedness, Response and Cooperation, (30 November 1990), 30 I.L.M 733.
[44] Article 3(3).

The OPRC has been hailed as the most efficient global instrument on the subject of pollution from offshore oilrigs.[45] However, despite the fact that it calls for the application of the polluter pays principle in its preamble, it contains no provision on the issue of liability for pollution damage.

iv) London Dumping Convention[46]

We have noted that the decommissioning and disposal of oilrigs raises environmental concerns. The contracting parties of the London Dumping Convention pledge themselves to promote measures to protect the marine environment against pollution caused, *inter alia*, by hydrocarbons, including wastes from offshore operations.[47] The issue of civil liability for pollution damage is dealt with, so to say, under article 10, which states that:

> In accordance with the principles of international law regarding State responsibility for damage to the environment of the other States or to any other area of the environment, caused by dumping wastes and other matter of all kinds, the Contracting Parties undertake to develop procedures for the assessment of liability and the settlement of disputes regarding dumping.

b) Evaluation of the Global Conventions

The state of international global treaty law on civil liability for pollution damage from offshore operations leaves much to be desired. There is a tendency in the treaties discussed to ignore the issue. Where an attempt is made to address the issue it is dealt with in a deliberative and side-wind fashion. What one finds are countless exhortations to states to take preventive measures against pollution. Liability and compensation issues

[45] ESMAEILI, OFFSHORE OIL RIGS, *supra* note 2 at 158.
[46] Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, (29 December 1972).
[47] Article 12 (a), (c) and (f).

are relegated to the background for future consideration, perhaps awaiting the occurrence of a major catastrophe before action is taken to contain the effects. The current situation is too reminiscent of the painful fact that international law is always a step behind reality.

The LOSC in particular is a major disappointment in view of the lukewarm manner with which it tackles the issue. Even under Annex III where pollution damage is stated to attract liability for offshore contractors on the high seas, the scope and extent of liability is not defined. This will be a perfect recipe for dispute and disagreement.

A common theme, which runs through the global conventions, is admonishing of states to cooperate to adopt regional instruments to address the issue. This factor, coupled with the recognition in the conventions that national laws are not to be less effective in preventing, reducing and controlling pollution, have given credence to the continued proliferation of regional agreements to which we now turn our attention.

Part IV – Regional Agreements

i) The Persian Gulf

The sea area shared by Bahrain, Iran, Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates represents the Persian Gulf, which supplies almost 60 per cent of the oil required by industrial nations.[48]

The Kuwait Regional Convention[49] and its three protocols[50] regulate activities in this area. Apart from general obligations to prevent marine pollution, the convention places a

[48] ESMAEILI, OFFSHORE OIL RIGS, *supra* note 2 at 164.

specific duty on the parties to take all appropriate measures to "prevent, abate, and combat pollution…resulting from exploration and exploitation of the bed of the territorial sea and its sub-soil and continental shelf..."[51] The parties then undertake to co-operate to formulate appropriate rules and procedures for the determination of civil liability and compensation schemes for damage resulting from pollution of the marine environment.[52]

The Kuwait Exploration Protocol follows the mother convention in imposing obligations for marine pollution prevention. Regrettably, it is dead silent on the issue of liability for pollution damage.

ii) The Mediterranean Sea

The 1976 Barcelona Convention is the framework agreement governing the Mediterranean Sea, which borders 21 states and 3 continents. The parties to the convention are obliged to combat pollution resulting from offshore operations.[53] The parties also pledge to "cooperate as soon as possible in the formulation and adoption of appropriate procedures for the determination of liability and compensation for damage resulting from the pollution of the marine environment."[54]

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[49] Kuwait Regional Convention for Co-operation on the Protection of the Marine Environment from Pollution, 1978, Int'l Envt. Rep'r p.21: 2721.
[50] The relevant one is Protocol Concerning Marine Pollution from Exploitation of the Continental Shelf, 29 March [Hereafter referred to as the Kuwait Exploration Protocol].
[51] Article 7.
[52] Article 13.
[53] Article 7.
[54] Article 12.

The Mediterranean Exploration Protocol is also relevant here.[55] Offshore activities in the coverage area are subject to prior written authorization from the concerned authority.[56] The protocol requires state parties to impose a general obligation upon operators of offshore installations to use the best available, environmentally effective and economically appropriate techniques while observing internationally accepted standards regarding wastes, well use, storage and discharge of harmful or noxious substances.[57] An operator is also obliged to remove any installation that is abandoned or disused.[58] Sanctions are to be imposed for illegal disposal of wastes and harmful or noxious substances[59] and for breach of obligations by operators.[60]

Article 27 of the Mediterranean Exploration Protocol is very instructive. Under this provision, the parties undertake to cooperate as soon as possible to formulate and adopt appropriate rules and procedures for determining liability and compensation schemes for offshore pollution damage. In the interim, however, the parties are required to impose liability and compensation schemes upon operators. The guiding principle here is that the compensation to be paid must be prompt and adequate.

iii) The Red Sea and the Gulf of Aden

Holding some of the world's largest oil and gas reserves and bordered by Djibouti, Egypt, Jordan, Saudi Arabia, Somalia, Sudan, and Yemen, the Red Sea and Gulf of Aden area is

[55] Protocol for the Protection of the Mediterranean Sea against Pollution Resulting from Exploration and Exploitation of the Continental Shelf and the Seabed and its Subsoil, 1994.
[56] Article 4.
[57] Article 8.
[58] Article 20.
[59] Article 13.
[60] Article 7.

governed by the 1982 Jeddah Convention.[61] This convention is not too different from the previously discussed conventions. It only urges the parties to cooperate in the formulation of civil liability and compensation rules and procedures for pollution damage.[62] Moreover, its relevant protocol[63] contains no provision of substance on the question of liability.

iv) The Nordic Area

Denmark, Finland, Norway and Sweden adopted the Environmental Protection Convention[64] to guard against environmentally harmful activities. Such activities are defined to include the discharge from installations of solid or liquid waste and gas into the sea and the use of such installations in a manner that entails pollution of same. The convention is made applicable to the continental shelves of the parties.

A person who has suffered pollution damage from environmentally harmful activities has a right of audience before the courts or the administrative authority of the state under whose jurisdiction the activities were carried out.[65] The forum for redress is mandated to determine issues of compensation for damage.[66] "The question of compensation shall not be judged by rules which are less favourable to the injured party than the rules of compensation of the State in which the activities are being carried out."[67] The

[61] Regional Convention for the Conservation of the Red Sea and Gulf of Aden Environment, Jeddah, 1982.
[62] Article 13.
[63] Protocol concerning Regional Co-operation in Combating Pollution by Oil in Cases of Emergency, Jeddah, 14 February 1982.
[64] Nordic Environmental Protection Convention, Stockholm, 19 February 1974.
[65] Article 3.
[66] *Ibid.*
[67] *Ibid.*

supervisory authority of a state party also has the right to institute proceedings in another contracting state for the purpose of guarding its interests.[68]

v) The Baltic Sea

The 1992 Helsinki Convention,[69] which entered into force on 17 January 2000, replaces the 1974 Convention bearing the same name. The 1992 Convention seeks to assure the ecological restoration of the Baltic Sea by ensuring the possibility of self-regeneration of the marine environment.[70] States are urged to preserve the marine environment by application of the precautionary principle to prevent pollution from offshore operations.[71]

On the question of liability for pollution damage, the parties are simply obliged to apply the polluter-pays principle[72] and to jointly develop rules concerning damage resulting from acts or omissions in contravention of the convention.[73] Such rules must incorporate limits of responsibility, criteria and procedures for the determination of liability and available remedies.[74]

vi) West and Central Africa

From Mauritania running through the west coast of Africa down to Namibia, and splashing the shores of the oil powerhouse of Nigeria, the West and Central African

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[68] Article 4.
[69] Convention on the Protection of the Marine Environment of the Baltic Sea, Helsinki, 1992.
[70] *Ibid.* Preamble.
[71] Articles 3 and 12.
[72] Article 3(4).
[73] Article 25.
[74] *Ibid.*

Marine Region is governed by the Abidjan Convention[75] and its Emergency Protocol.[76] Noting that existing conventions concerning the marine environment do not address extensively issues under its coverage, the Abidjan Convention imposes a duty on its parties to take appropriate measures to preserve the marine environment.[77] The parties undertake to co-operate in the formulation and adoption of appropriate rules on the issue of liability for pollution damage. The Emergency Protocol contains no helpful provisions for our purpose.

vii) East African Region

Spanning the marine area from Southern Somalia to Northern South Africa, the East African Region is governed by the Nairobi Convention[78] and its two Protocols.[79] Set along the lines of the Abidjan Convention, the Nairobi Convention imposes a general obligation upon the parties to prevent pollution from seabed activities and to cooperate for the formulation of pollution damage liability principles in accordance with international law principles. None of the Nairobi Protocols contains any provision of substance with respect to liability.

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[75] Convention for Co-operation in the Protection and Development of the Marine and Coastal Environment of West and Central Africa Region, Abidjan, 23 March 1981

[76] Protocol concerning Co-operation in Combating Pollution in Cases of Emergency, Abidjan, 23 March 1981.

[77] Article 4.

[78] Convention for the Protection, Management and Development of the Marine and Coastal Environment of the Eastern African Region, Nairobi, 21 June 1985.

[79] Protocol concerning Co-operation in Combating Marine Pollution in Cases of Emergency in the Eastern African Region, Nairobi, 21 June 1985; Protocol concerning Protected Areas and Wild Fauna and Flora in the Eastern Africa Region, 21 June 1985.

viii) The Wider Caribbean Region

This region encompasses all the insular and coastal states and territories bordering the Caribbean Sea, including Belize and the Gulf of Mexico to Guyana. It is governed by the Cartagena de Indias Convention[80] and its Oil Spills Protocol.[81] While the Protocol focuses on emergency response to catastrophic oil spills and contains nothing on liability for damage caused by such spills, the Convention merely admonishes the parties to cooperate for the formulation of liability rules.

ix) South Pacific

The Island dominated South Pacific is governed by the Noumea Convention[82] and its Protocols.[83] The comments on the Cartegena de Indias agreements concerning the Wider Caribbean area apply to the Noumea treaties.

x) South-East Pacific

Spanning the entire length of the Pacific coast of South America from Panama to Cape Horn, the South Pacific Marine Region is governed by the Lima Convention together with five protocols and two more protocols in the offing.[84] It should be pointed out that none of the protocols provides any rules on civil liability for pollution damage. Aside

[80] Convention for the Protection of the Marine Environment of the Wider Caribbean Region, (24 March 1983), Int'l Env'tal Rep'r p. 21:3201.
[81] Protocol concerning Cooperation in Combating Oil Spills in the Wider Caribbean Region, (24 March 1983), Int'l Env'tal Rep'r p. 21:3261.
[82] Convention for the Protection of the Natural Resources of the South Pacific Region, (24 November 1986), Int'l Env'tal Rep'r p.21:3171.
[83] Protocol for the Prevention of Pollution of the South Pacific Region by Dumping, Noumea, 25 November 1986; Protocol concerning Co-operation in Combating Pollution Emergencies in the South Pacific Region, Noumea, 25 November 1986.
[84] Convention for the Protection of the Marine Environment and the Coastal Area of the South-East Pacific, Lima, 12 November 1981.

from the usual obligations to prevent pollution of the marine environment and exhortations to adopt rules on the issue of pollution civil liability, the Lima Convention obliges the parties to "ensure that recourse is available in accordance with their legal systems for compensation or other relief in respect of damage caused.[85]

xi) North-East Pacific

Lying to the west of Columbia, Costa Rica, El Salvador, Guatemala, Honduras, Mexico, Nicaragua and Panama, the North-East Pacific region is governed by the recent Antigua Convention.[86] It imposes the usual general obligations for pollution prevention on the basis of the precautionary principle. It also calls for the application of the polluter- pays principle by "virtue of which those responsible for pollution should pay the full costs of measures to prevent, control, reduce and remedy such pollution, with due regard for the public interest."[87] The adoption of liability and compensation rules on pollution damage is postponed to be dealt with in a future protocol.[88]

xi) The Black Sea

Lodged between southeastern Europe and Asia Minor and connected to the Mediterranean Sea by the Bosporus and the Sea of Marmara, and to the Sea of Azov by the Strait of Kerch, the Black Sea is governed by the Bucharest Convention[89]and its two

[85] Article 11(2).
[86] Convention for Cooperation in the Protection and Sustainable Development of the Marine and Coastal Environment of the Northeast Pacific, Antigua, 18 February 2002.
[87] Article 5(6)(b).
[88] Article 13.
[89] Convention for the Cooperation in the Protection of the Black Sea against Pollution, 1992, 32 I.L.M. 1110.

protocols.[90] The convention obliges each party to adopt rules and regulations on liability for pollution damage from offshore operations,[91] with the aim of ensuring the highest degree of deterrence and protection of the Black Sea.[92] The compensation payable should be prompt and adequate with recourse for redress in accordance with the legal systems of the parties.[93] No useful purpose will be served by discussing the two Bucharest Protocols since they contain nothing on civil liability for pollution damage resulting from offshore operations.

xii) North-East Atlantic

The 1992 OSPAR Convention[94] governs the North-East Atlantic as it replaces the 1972 Oslo Convention on the Prevention of Marine Pollution by Dumping from Ships and the 1974 Paris Convention on the prevention of Marine Pollution from Land Based Sources. The OSPAR Convention contains comprehensive provisions on the prevention of pollution from offshore activities.[95] On the issue of liability, Article 2(2)(b) requires the application, without more, of the "polluter pays principle, by virtue of which the costs of pollution prevention, control and reduction measures are to be borne by the polluter."

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[90] Protocol on Protection of the Black Sea Marine Environment against Pollution from Land Based Sources, Bucharest, 1992; Protocol on Cooperation in Combating Pollution of the Black Sea Marine Environment by Oil and Other Harmful Substances in Emergency Situations, Bucharest, 1992.
[91] Article 16(2).
[92] Article 16(4).
[93] Article 16(3).
[94] Convention for the Protection of the Marine Environment of the North-East Atlantic, (22 September 1992), 32 I.L.M. 1069.
[95] Annex III.

xiii) The North Sea

The North Sea contains Western Europe's largest oil and natural gas reserves.[96] The 1983 Bonn Agreement[97], which governs this area, is dedicated to preventing grave and imminent danger to coastal areas by oil spills and other harmful substances. It merely stresses that its provisions do not prejudice the rights of a party of being reimbursed for costs of action dealing with pollution or the threat of pollution.

However, seven years prior to the adoption of the Bonn Agreement, Belgium, Denmark, France, the former West Germany, Ireland, the Netherlands, Norway, Sweden and the United Kingdom adopted the London Civil Liability Convention (LCLC).[98] This convention applies exclusively to pollution damage resulting from an incident occurring beyond the coastal low-water line at an installation under the jurisdiction of a Controlling State,[99] and suffered in the territory of and areas within which a State Party exercises sovereign rights over natural resources.

The LCLC establishes a strict liability regime under which operators of an installation are jointly and severally liable for any pollution damage resulting from an incident.[100] However, no liability arises where it is established that the damage resulted from an act of war, hostilities, civil war, insurrection, an act or omission done with intent to cause

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[9696] Country Analysis Brief: North Sea, online: EIA <http://www.eia.doe.gov/emeu/cabs/northsea.html>
[97] Agreement for Co-operation in Dealing with Pollution of the North Sea by Oil and other Harmful Substances.
[98] Convention on Civil Liability for Oil Pollution Damage Resulting from Exploration for and Exploitation of Seabed Mineral Resources, (16 May 1977), 16 I.L.M. 1451.
[99] Defined as a State Party which exercises sovereign rights for the purpose of exploring the resources of the seabed and its subsoil in the area in or above which the installation is situated – Article 1(4).
[100] Article 3.

damage by the person suffering the damage, or a natural phenomenon of an exceptional, inevitable and irresistible character.[101]

An offshore installation operator is entitled to limit his liability for each installation and each incident to the reviewable amount of 30m Special Drawing Rights.[102] However, he is not entitled to limit his liability if it is proved that the damage occurred because of an act or omission by the operator, done deliberately with the actual knowledge that pollution would result.[103]

A claim for compensation for pollution damage may be brought against the operator or directly against his insurer[104] but only in the courts of the State party where the damage was suffered.[105] Compensation rights are effectively extinguished four years after a cause of action arises.[106] A recognized judgment is enforceable in each state party as soon as formalities required in that state have been complied with.[107] Finally, a state is not prevented from providing for unlimited liability or a higher limit than what is specified under the convention.[108]

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[101] *Ibid.*
[102] Articles 6. Special Drawing Rights has the meaning as defined by the International Monetary Fund and used for its own operations and transactions – Article 1(9).
[103] *Ibid.*
[104] Article 8.
[105] Article 11.
[106] Article 10.t
[107] Article 12.
[108] Article 15.

xiv) United States / Mexico Marine Pollution Agreement[109]

This agreement was brokered following the *Ixtoc I* offshore well blowout off the Bay of Campeche on 3 June 1980. It calls for preventive measures aimed at eliminating the threat of marine pollution by petroleum in all its forms. The agreement contains no concrete provisions on civil liability for such pollution.

xv) Offshore Pollution Liability Agreement (OPOL)[110]

OPOL is not an agreement between states. It is a contract among operators of, and those who intend to become operators of, offshore facilities used in connection with exploration for or production of oil and the exploration of or appraisal of gas.[111] It is intended to provide an orderly means for compensation and reimbursing any person who incurs costs for taking remedial measures as a result of a discharge of oil from an offshore facility. It should be noted that the agreement is not applicable to abandoned wells, installations or pipelines.[112]

OPOL establishes a strict liability regime under which a person who has sustained damage or taken remedial measures against the polluting effects of the offshore operations of a party is entitled to be compensated or reimbursed, up to a maximum limit

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[109] Agreement of Cooperation between the United States of America and the United Mexican States Regarding Pollution of the Marine Environment by Discharges of Hydrocarbons and other Hazardous Substances, (24 July 1980), 20 I.L.M. 696.
[110] 1974 as amended on 1 August 1986.
[111] The original members are Amoco (UK) Exploration Co., Burmah Oil (North Sea) Ltd., BP Petroleum Development Ltd., Total Oil Marine Ltd., Conoco North Sea Inc., Esso Exploration and Production U.K. Inc., Gulf Oil Production Co., Hamilton Brothers Oil Co. (GB) Ltd., Mobil North Sea Ltd., Shell U.K. Ltd., Phillips Petroleum Co., Signal Oil and Gas Co. Ltd., Siebens Oil and Gas (U.K.) Ltd., Texaco North Sea Sun Oil Co. Ltd., and Cluff Oil Ltd.
[112] Clause I (10)c

of $120,000,000 per incident, subject to some provisos.[113] Defenses similar to those under the LCLC are available to an operator.[114] A cause of action extinguishes one year from the time it arose.[115] A cause of action is to be submitted to arbitration in London in line with the rules of the International Chamber of Commerce.[116] This forum is exclusive for disposing of such disputes.[117]

Evaluation of the Regional Agreements

The dreary descriptive analysis of the various regional and other agreements was intended to reveal the unconvincing and highly unsatisfactory state of civil liability regime for pollution damage resulting from offshore operations. A charitable observation is that the world community appears to find solace and virtue in inaction where action is gravely needed. The trend so far has been to stall and wait for the occurrence of an incident of immense catastrophic proportions, by which time the remedial measures may be rendered nugatory.

It is disturbing that most of the regional arrangements do not deal directly with the issue of civil liability and compensation for pollution damage. The sad practice has been merely high sounding admonishing of states to take future action to develop liability rules – a future which never appears to arrive and perhaps may never arrive – "tomorrow is another day, in the immortal words of the cinematic star."[118]

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[113] Clause IV (A).
[114] Clause IV (B).
[115] Clause VI.
[116] Clause IX.
[117] *Ibid.*
[118] GAVOUNELI, POLLUTION, *supra* note 10 at 149.

Even where an attempt is made to address the issue of liability directly, the principles are generally and painfully captured in the hallowed words – "the parties shall apply the polluter-pays principle" – and nothing more. A few of the agreements, including the Nordic, Bucharest and Lima Conventions, deserve particular commendation, though not too highly, for the attempt made therein to go beyond the mere future aspirations. The LCLC is undoubtedly the most important and comprehensive international agreement on civil liability for pollution damage resulting from offshore operations. However, it is not in force and like the other regional agreements, it lacks global application.

OPOL is also hugely commendable for its definitive and determinate provisions. However, it is a private contract that cannot "fully compensate for the lack of a comprehensive, worldwide, legally binding document that would address the issues of pollution from offshore installations and compensation for damage caused by it in a global perspective."[119]

It should also be noted that the absence of a global convention on the issue of civil liability for pollution damage resulting from offshore operations, coupled with the fact the regional agreements apply to areas within the jurisdiction of state parties, means that no liability regime applies to the high seas and other areas beyond the limits of national jurisdiction. In the next part, we will attempt to ascertain whether the liability rules regulating the shipping industry may be assimilated to apply to offshore installations.

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[119] *Ibid.* at 120.

Part V – Offshore Oil Rigs as Ships

We have noted that unlike the case with offshore installations, civil liability for ship source pollution damage is well defined in global conventions.[120] The shipping conventions are designed to ensure the payment of adequate compensation to sufferers of pollution damage. The regime endangers certainty for both the industry and claimants.

In the absence of a global civil liability convention regulating offshore activities, it may be worthwhile to ascertain whether offshore installations qualify as ships under the shipping conventions so as to assimilate those rules to apply to them. The analogy is often drawn between oilrigs and ships in the oil and gas industry for the reason that:

> There are several basic (and conceptually important) similarities between transnational injury caused by a tanker spill and transnational injury caused by an offshore drilling platform blowout. First, both situations present the prospect of extensive liability to the individual or entity found to be responsible for the underlying activity. Second, both of the underlying activities are extremely valuable to the international community; and that community has a strong economic interest in promoting those activities. Finally, it would be impossible through the exercise of due care to totally eliminate the risks of harm inherent in those activities.[121]

i) Types of Offshore Oil Rigs

It is prudent to consider the different types of rigs for offshore operations before we go into the definitions. Offshore oilrigs may be classified into mobile units and fixed platforms. The first category rigs are generally classified as floating and bottom-

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[120] These include, International Convention on Civil Liability for Oil Pollution, 1969, 9 I.L.M. 45 to be replaced by its 1992 Protocol; International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage, 1971, 11 I.L.M. 284 and its protocols; International Convention on Civil Liability for Bunker Oil Pollution Damage, 2001.

[121] William N. Hancock and Robert M. Stone, *Liability for Transnational Pollution Caused by Offshore Oil Rig Blowouts*, 5 HASTINGS INT'L & COMP. L. Rev. 377, 384-5 (1982).

supported.[122] Floating rigs include drill ships,[123] semi-submersibles[124] and barges.[125] Bottom-supported rigs include submersibles[126] and jack-up drills.[127] Fixed platforms on the other hand, are similar to onshore oilrigs though they possess more elaborate features.[128] Any assimilation of rules from the shipping industry must take the differences into consideration.

ii) The Definitions

The definition of ship in international law is function and object specific. Hence, no standard definition exists. The 1969 Civil Liability Convention[129] defines ship in article 1 as "any sea-going vessel and any seaborne craft of any type whatsoever, actually carrying oil in bulk as cargo". It appears that this definition does not apply to oilrigs because even the mobile rigs are not designed to carry oil in bulk as cargo.[130]

The definition of ship under the 1971 Fund Convention[131] is the same as that of the 1969 Civil Liability Convention. The 1992 Protocol to amend the 1969 Convention is even

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[122] ESMAEILI, OFFSHORE OIL RIGS, *supra* note 2 at 12.
[123] Drill ships look like ships but have a derrick on top which drills through a hole in the hull. They are either anchored or positioned with computer-controlled propellers along the hull which continually correct the ship's drift – source: Industry Information: Petroleum Topic Fact Sheet, online: Australian Institute of Petroleum <http:www.aip.com.au/industry/fact_offshore.htm#top> [AIP].
[124] Semi-submersibles are mobile structures, some with their own locomotion. Their superstructures are supported by columns sitting on hulls or pontoons which are ballasted below the water surface – source: AIP, *ibid.*
[125] A drilling barge "resembles a barge rather than a ship and is usually box shaped or semi-shaped." – ESMAEILI, OFFSHORE OIL RIGS, *supra* note 2 at 16.
[126] Submersibles are for drilling in shallow waters where they are floated and ballasted to sit on the seabed – source: AIP, *supra* note 123.
[127] Jack-up drilling units are self elevating. Their legs are lowered to the seabed and the hull is jacked-up clear of the sea surface – source AIP, *ibid.*
[128] ESMAEILI, OFFSHORE OIL RIGS, *supra* note 2 at 16.
[129] *Supra* note 120.
[130] ESMAEILI, OFFSHORE OIL RIGS, *supra* note 2 at 33.
[131] *Supra* note 120.

more definite on excluding oilrigs from its purview. Article 1 defines a ship as:

> …any sea-going vessel and seaborne craft of any type whatsoever constructed or adapted for the carriage of oil in bulk as cargo, provided that a ship capable of carrying oil and other cargoes shall be regarded as a ship only when it is actually carrying oil in bulk as cargo and during any voyage following such carriage unless it is proved that it has no residues of such carriage of oil in bulk aboard.

It appears that the 2001 Bunker Convention provides a leeway.[132] Article 1 defines a ship widely as "any seagoing vessel and seaborne craft of any type whatsoever." Mobile offshore units may fall within this definition hence enabling the application of the liability rules under the convention to be applicable to them. Article 2 makes the Bunker Convention apply exclusively to pollution damage caused in the territorial seas and exclusive economic zones of party states. Therefore, it is inapplicable to areas beyond the limits of national jurisdiction.

Concluding Remarks

We have pointed out that there is a distinct absence of a global instrument on civil liability for pollution damage arising from offshore operations. We have noted the adverse effects of pollution from such activities. We have examined the international customary and treaty law position on the issue. We have traversed various regional agreements with no avail. We just attempted, with little success to assimilate the civil liability regime of the shipping industry to offshore operations. The irresistible conclusion is that the present state of the civil liability regime for pollution damage from offshore operations typifies the doomsday adage – "between the Devil and the deep blue sea".

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[132] *Supra* note 120.

A global instrument on the subject is badly needed. Such an arrangement must possess certain salient features, including making it applicable to all zones of the sea. Another feature should be an efficient enforcement mechanism defined by Reisman as "a purposive particularization of a public sanctioning system."[133] The absence of a potent enforcement mechanism would render the arrangement a mere declaration of intentions. Private individuals should also be given the right of audience before the system's adjudicating forum.

A very important feature should, off course, be the basis and extent of liability of the tortfeasor. From the authorities liability may be strict, absolute or based upon fault (negligence). Each type has its own pros and cons depending on whether the beholder is a claimant or a defendant.

Liability is absolute where the defendant is afforded no defence whatsoever. The entirety of the loss falls on him without any due consideration of extenuating factors, which may diminish his responsibility for the damage caused. The defendant is liable for damage caused in relation to his operations even if the incident in question is attributable to an act or omission of a third party. This type of liability perhaps owes its origin to the common law tort doctrine of absolute liability beginning with the celebrated English case of *Rylands v. Fletcher*.[134]

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[133] William M. Reisman, *Sanctions and Enforcement* in CYRILL E. BLACK AND RICHARD A. FALKS, EDS., THE FUTURE OF THE INTERNATIONAL LEGAL ORDER, vol 3, 300 (Princeton: Princeton University Press, 1971).
[134] (1866) L.R. 1 Ex. 265; L.R. 3 H.L. 300.

Liability based on negligence holds the defendant liable for only the damage resulting from an incident that is attributable to his lack of taking reasonable care to prevent the occurrence of the incident in question. Thus, he is exculpated from liability if he is able to show that he took all due care and yet the incident occurred because it defies the taking of utmost care.

Strict liability is a moderation of absolute liability. It is a compromise between the considerations – "if the defendant has some dangerous thing under his control which subsequently causes damage why should a plaintiff have to prove negligence?"[135] – and "is it equitable that the defendant should be liable for circumstances beyond his control?"[136] Under this rubric, the defendant is made liable for damage resulting from and in relation to his industry. However, he is afforded defences like act of God, act of war, act of state, acts or omissions of a third party, and intentional acts of a claimant calculated to cause the harm complained of.

It is submitted that a global treaty on civil liability for pollution damage arising from offshore operations should be based on strict liability principles. Absolute liability appears to be harsh and fault liability appears to be permissive in their application. It has been asserted that the "strict liability doctrine should be utilized in public international law because the concept is now accepted in nations throughout the world."[137] Nevertheless, the question often raised on the basis of equity is that "it may be too severe

[135] C.W.M. Ingram, *Oil Pollution – Rylands v. Fletcher*, 121 NEW L.J. 183 (1971).
[136] *Ibid.*
[137] CHURCHILL AND LOWE, THE LAW OF THE SEA, *supra* note 3 at 702.

a burden upon the industry to make it strictly liable without any limitation."[138] However, in the absence of negligence, leaving the loss where it fell would be unreasonable and unfair to the sufferer of such loss.[139] Indeed:

> The creator of an abnormally great risk [should] be strictly liable because, between the creator and the innocent victim, the one who engages in the dangerous profit-making activity is best able to predict and allocate the risk of loss. The enterprise can spread the loss through slightly higher prices to consumers whereas an innocent victim cannot.[140]

Technological advancement and the increase in demand for petroleum products will necessarily push upwards the incidence of offshore operations leading to an increase of the pollution risk such activities pose to the marine environment. A potent and aggressive civil liability regime should be established to cater for the unthinkable. A comprehensive treaty with global reach is the key. All other ground is sinking sand.

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[138] Carl A. Fleischer, *The Lessons of the Ekofisk Bravo Blowout* in CUSINE AND GRANT, EDS., THE IMPACT OF MARINE POLLUTION (LONDON: CROOM HELM LTD., 1980) 135 AT 147.
[139] Samuel Bergman, *No Fault Liability for Oil Pollution Damage*, 5 J. MAR. L. & COM. 1, 37-8 (1973).
[140] Melissa B. Cates, *Offshore Oil Platforms Which Pollute the Marine Environment: A Proposal for an International Treaty Imposing Strict Liability*, 21 SAN DIEGO L. REV. 691 (1984).