

Keeping Our Shores Clean; How To Move Towards a Safe Offshore Oil Industry In 21st Century?

Misbah Saboohi

College of Law

Prince Sultan University

Riyadh 11586 KSA

msaboohi@psu.edu.sa

Abstract

The world dependency on oil is not diminishing. How can we protect environment yet allowing economy to prosper? The future of oil industry is in offshore drilling but the body of International law that regulates the environment *viz a viz*-offshore oil industry has had rough relation. This article aims to sift through the treaty liability rules applicable to oil spill accidents from offshore drilling. The discussion explores the current scope of compensation in offshore oil accidents e.g. employee deaths, community losses, related economic losses, natural resources damage. Issues such as class-tort claims the civil and criminal charges/penalty against the responsible parties in oil industry, and possible defense strategies, are also discussed. Civil liability for pollution damage is known and firmly recognized under International law. But there is no global international treaty that addresses this question with respect to offshore oil and gas exploration. This may be due to the scarcity of the happening of offshore oil well blow-outs. But whatever incident took place had devastating effects on marine environment. The article offers some recommendations to re-invent international legal system for better protection of marine environment by the offshore oil companies through better preparedness rules, stronger insurance system and efficient liability laws. This review is in light of technical equipment and facilities needed or used during such activities which may include offshore platforms (fixed or floating), offshore storage/loading systems, wells, offshore pipelines, deep sea drilling units and other associated offshore equipment, constructions, and installations.

Keywords

1. Marine environment, 2. offshore oil company, 3. Pollution Compensation, 4. strict liability, 5. polluter pays principle.

1.Introduction

The oil trade for commercial purposes began in mid 1800s, and became more widespread when petroleum and vehicle engines were invented consuming that petrol(Burger 1997) . Many of our daily merchandises are also linked to petroleum industry and the by-products it produces. USA is at this moment the world's largest oil producing (not exporting) country in the world (Investopedia -2018). It produced in 2017 an average of 14.86 million barrels/day, which accounts for 15.3% of the world's production. USA surpassed Saudi Arabia in oil production in 2013. The world's largest oil companies, as well as some small and medium sized enterprises (SMEs), involve in offshore activities. Only very few offshore operators are classified as "majors" in the Gulf of the Mexico (the main offshore oil field in the U.S.). In the EU and Norway, a few large companies play a key role in offshore oil activities, while SMEs also control a considerable number of wells(Faure 2015). But crude Oil has special challenge i.e. it is underground as fossil fuel, and needs complicated, technological procedures to fetch it to surface. As a result many accidents occur and cause environment damage. It should be alarming that world's most dreadful oil spill accidents happened in United States by offshore oil companies . Exxon Valdez oil spill happened in March 1989 at Prince William sound, Alaska that leaked 10.8 million gallons of oil into the sea and then in 2010 Gulf of Mexico oil spill occurred (also known as Deepwater horizon oil spill or BP oil spill). BP oil discharged 200 million gallons of crude oil into the ocean. In 2008 the supreme court of United states reduced the punitive damages of the affected from US\$ 2.5 billion to only US \$ 500 million(Exxon case 2008). In BP oil spill case the court under its 'Supervised Settlement Program' dispensed nearly US\$ 65 billion to the claimants until now(The guardian 2018). The 2009 Montara accident in Australia opened the discussion on the need of an international framework to regulate liability and compensation in accidents arising from offshore oil drilling. The Montara platform is about 250 km off the north-west coast of Australia and it blew out during the drilling of a new well. The oil spill damaged the marine environment upto Indonesian waters and caused socio-economic hardship to coastal communities whose means of support depend on the sea and its resources These accidents show the weaknesses of present legal regimes for quick, adequate damage control and compensation for the marine environment damage due to offshore oil operations.

2. Importance of Offshore Oil Facilities For the Economy:

Oil drilling activities have always played an important and crucial role in the world economy. It is estimated that offshore oil systems produce around 15.4 million barrels of oil per day globally(Quest offshore resources 2011). In the United states alone there were 2,657 offshore installations in 2013(OCS Report) These installations provide approximately 5% of US domestic natural gas production and about 21% of domestic oil. In EU and Norway, over 90% of the oil and over 60 % of the gas produced comes from offshore operations(SEC paper 2011). Almost 1,000 offshore installations are operating in EU waters. This means offshore oil activities are not just profitable industry, but they will also play an important role in future. The U.S Bureau of Ocean Energy Management (USBOEM) estimates that oil and gas resources in undiscovered fields on the Outer Continental Shelf of the US are 89 billion barrels of oil and 398 trillion cubic feet of gas which means that 69 % of the oil and 26 % of the natural gas in local fields is yet to be explored. Many new oil and gas fields are also discovered in recent years in the EU and Norway (Latest one is Johan Sverdrup field, with total reserves estimated at 1.7 to 3.3 billion barrels of gross recoverable oil). In short, offshore oil industry is the future economy because world at the moment is using the land based oil reserves usually from the Middle East that are fast diminishing . The old sources of oil cannot be relied on anymore. The lower land-end of forty-eight states in USA and from the North of Alaska are in decline and the North Sea of Europe oil regions that were there 20 years ago are weak. Unrest in Venezuela , Nigeria and the Middle East threatens the flow of oil (Appenzeller 2004). Therefore the gigantic firms in oil business are eyeing this chance to take their share from offshore oil drilling. The best hope for slowing the United states and other industrial states' dependence on imported oil lies at adding deep sea oil resources. (All in all, oil experts estimate that the deep waters of the Gulf of Mexico will yield more than 25 billion barrels of oil.) That is twice as much as in Alaska's giant Prudhoe Bay oil field, and far more than in any unexploited U.S. prospect. China and Malaysia were major drillers of oil at sea in 2011,and now the Central Asian lands east of the Caspian Sea also boast of the biggest single discovery in 30 years. A vast oil reserve extends below the Caspian, called the Kashagan field, that could yield 7 billion to 13 billion barrels when developed. Recent market tendencies indicate that a turning point happened during 2018 when the biggest boom of offshore oil Was predicted in Europe with 4% increase , specially in Romania and Norway.

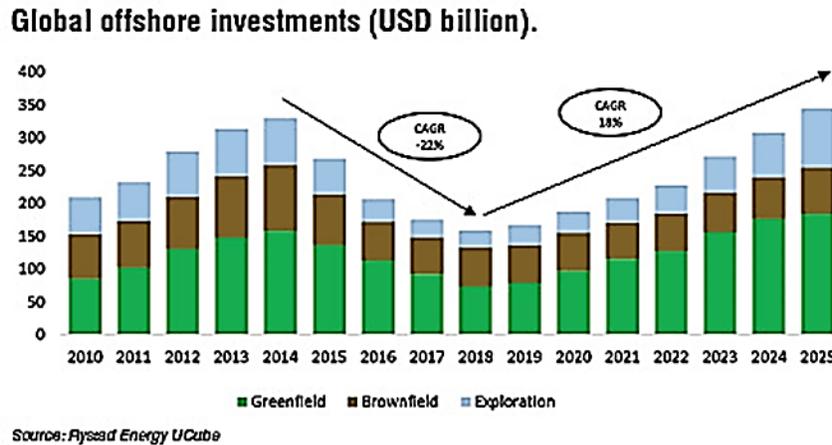


Figure 1. Off Shore oil Investment Estimate by 2025

3. Oil Pollution Risks And International treaties

Although the oil pollution occurring from land is more serious, but such effects are still possible to be tackled than oil pollution at sea waters. The effects of marine oil pollution are enormous. This is the reason that better laws are needed to intervene for prevention. The Response measures and compensation schemes for controlling marine oil pollution need to be re-examined specially when there are “Cap on liability” rules, which limit the oil companies’ duty to provide relief to victims and cover restoration costs. Compensation in such accidents is important not only because it provides relief to the victims and environmental restoration, but also because it helps giving incentives to operators and stakeholders to prevent these spills while growing their businesses. A balance is needed in all this for the smooth running of the oil exploration and the safety of the environment. The question that deserves attention is how a major offshore-related accident like the Deepwater Horizon spill can be compensated.

The deep sea oil drilling safety is a challenge because the mechanical pressure becomes unmanageable as the drill goes deeper into the seabed of ultra-deep waters. The risks are mainly two (Humphery 2011):

- a. Insolvency of the companies due to heavy costs of cleaning and removal of effects
- b. Lack of just, quick compensation for the victims due to ineffective laws

The trend has been to adopt some regional agreements to confront the issue. However, most of the regional arrangements deal with problem in a secondary manner and they lack global application. Some international conventions that regulate oil and gas activities are:

1. International Convention on Civil Liability for Oil Pollution Damage, 1969
2. The United Nations Convention on the Law of the Sea 1982 (UNCLOS 1982)
3. The International Convention for the Prevention of Pollution from Ships 1973 Annexure I (MARPOL 73/78)
4. International Convention on Oil Pollution Preparedness, Response and Co-operation 1990 (OPRC Convention)

4. Effectiveness of the Treaties

There has never been an international convention dealing specifically with offshore facility’s compensation and civil liability for oil pollution damage. There is at present no continuing course of action intended to fill this gap (Chabason, 2011). The international conventions are limited to shipping industry and ship owners only. For example, the International Convention on Civil Liability for Oil Pollution Damage 1969 (CLC 1969) and the International Convention on the Establishment of International Fund for Compensation for Oil Pollution Damage 1971 (Fund

Convention 1971) apply to cruise ships or tankers carrying oil as cargo. These treaties are being used for offshore oil facilities only because offshore drilling units/machines have been artificially categorized as ‘ships’ within the definitions of the CLC 1969 and the Fund 1971. International Maritime Organization (IMO rule 2003)) has ruled that offshore unit is to be considered ‘mobile floating unit’ like a ship in the sea waters. But actually some offshore units are fixed too and they cannot be treated as a ship. Kashubsky (Kashubsky 2007) points out that legal provisions for state responsibility under these treaties for the pollution from offshore installations are limited. He is of opinion that only two conventions presently can help holding coastal states liable in relation to offshore marine pollution:

- a. United Nation Convention On Law Of The Sea 1982
- b. International Convention on Oil Pollution, Preparedness, Response And Cooperation 1990

Kashubsky also argues that these treaties do not set any definite or specific legal standards to be followed and only encourage coastal states to cooperate with each other to develop national laws to tackle oil pollution. In other words only goodwill and good-faith is the duty, which is not enforceable in legal sense. The process for referring to other countries under international law of flag-state rule (called flag-state referrals) in such oil leak incidents occurring outside U.S. jurisdiction does not appear to be working. In fact Flag-state referral cases by Coast Guard office of United States were halted in 1995 because the response rate from other states has been very weak and poor. However, International Maritime Organization (IMO) is obligated under MARPOL to take action on these cases when they occur. Moreover, the relatively poor response rate from other countries on suspected discharge incidents is not in conformity with international agreements facilitated by IMO and undermines efforts to clear pollution of the world’s oceans (GAO Report 2000). UNCLOS lacks any definite rules on liability that would apply to the prevention of marine pollution resulting from offshore oil drilling (Stefankova 2013). It relies on general ‘polluter pays’ rule which needs evidence of negligence. It means that international law treaties are ineffective to deal particularly with marine oil pollution from offshore activities. The study of huge environmental impact from recent incidents, and significant claims arising there from show that the achievement of marine environment protection from offshore oil drilling can only be realized by sincere international co-operation and will. The lack of a cohesive international framework and fixing liability for marine pollution from offshore facilities inevitably raises the importance of international State responsibility and the crucial need for the embracing of new international legal regime to discourage and avert marine pollution from these facilities (Bosma 2012). International Maritime Organization (IMO) has not drafted any specific treaty for tackling only offshore industry related oil risks. In 2012, in 99th session meeting of IMO, its legal committee decided that current bilateral and regional treaties are enough to address all types of oil pollution risks (The committee mentioned in 2012 that IMO has authority to deal with questions associated to navigation activities, but not with questions associated to marine environmental pollution derived from other causes IMO Doc).

However regional arrangements not global and are meant for individual seas. As a result International treaties for Oil industry insist to use mainly local or coastal state’s domestic legal provisions for rectifying environment damage occurring from offshore technology. Perhaps the reason is that majority of offshore operations take place on the maritime zone of continental shelf which falls within the scope of the national jurisdiction of the coastal States in International law (Zong 2013). But domestic laws related to environment problems can be really challenging in providing adequate compensation which prove ineffective. Furthermore only specific seas are covered by these treaties. (e.g: a. Convention for the Protection of the Marine Environment of the North-East Atlantic of 1992 (OSPAR Convention) b. the Nordic Environmental Protection Convention (Nordic Convention). c The Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean (Barcelona Convention), d. the Convention on the Protection of the Marine Environment of the Baltic Sea Area (Helsinki Convention), e. the Convention for the Cooperation in the Protection of the Black Sea against Pollution, f. the Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region.). These treaties need the cooperation of other states in those regions for successful resolutions of cases. United Nations Environment program (UNEP) too does not provide a detailed guidance on offshore facility liability in case of accident. It only demands improvement of technology in oil drilling to prevent oil damage at sea.

Analysis of the individual country’s national laws on offshore activities again points to same lacuna that these laws were developed only after major accidents. It is like becoming wiser after the accident and a fire-fighting attitude. USA, UK, Norway Australia, Denmark and Canada have strong offshore oil interests, yet have no specific liability regime for preventing and compensating marine pollution therefrom. United Kingdom has no law of its own for

offshore oil operation or pollution. It uses Offshore Oil Pollution Liability Association Ltd (OPOL), which is a private company limited by guarantee and operates under voluntary compensatory scheme. OPOL has 122 members. United Kingdom Government requires oil companies to first become signatory to OPOL before any license is issued. Under OPOL operating companies agree to accept liability for marine pollution damage and the cost of remedial measures up to a maximum of US \$250,000,000 per incident. This is not sufficient in many cases due to extraordinary oil damage to marine environment and the victims are pushed into long court litigation under common law principles of Tort Law which is time consuming and burdensome. In United states has federal law of Oil Pollution Act 1990 (OPA) which is constantly challenged by states. Australia has Australian Offshore Petroleum Act 2006, Norway has Norwegian Petroleum Activities Act 1996 (amended in 2011) Canada has Canada Oil and Gas Operations Act 1985 and there is also Subsoil Act of Denmark 2011. The common features of these laws are :

1. Liability is of the Owner operator.
2. There is 'joint and several liability' under negligence law, of all companies when owners, operators, licensees and users of easements are different parties and it cannot be determined in a just way who carries major responsibility for pollution.
3. Oil companies shy away from application of any law based on absolute liability because it imposes total liability regardless of fault.
4. There is a legal cap on the liability on offshore activities under UK, USA and Canadian law which means liability will be limited and may leave some losses uncovered. The effected cannot get full compensation for damages to their livelihoods in marine businesses.
5. All of these countries require that the operator to provide financial security which makes the business very expensive and only big tycoons can afford to enter the field.

The financial instruments/tools that are currently used in national corporate sector to cover liability following a major marine oil accidents include:

- a. self-insurance by the operators &(re)insurance
- b. risk pooling schemes
- c. fund
- d. various combinations of the above

But Insurance schemes for offshore activities usually cover limited heads of damages like :

- physical damage to fixed drills
- damage to production and accommodation facilities
- expenses to regain control of the effected well
- general environment damage
- employee injury or death
- General business loss.

It means that most oil companies will not make full compensation due to cap or imposed legal limits after accident, then how can we expect them to take efficient precaution measures for future risks. Economic analysis of law has always guided that if there are strong liability regime for oil companies, they will plan to prevent oil pollution. If the parties liable for marine pollution do not have to pay the full costs of the accident, either due to a cap on liability or the limited assets they possess, offshore operators will not invest in efficient 'precautionary' plans to prevent accidents, (Prevention is better than cure) . Oil companies are driven by profit race, and they pay little attention to prevention costs. This means the legal regimes are not effective to prevent offshore drilling accidents or to provide just compensation after an accident. The ultimate challenge for the compensation regimes for off shore oil spills is how to give claimants a just and effective compensation processes rather than forcing them to take their chances through representation in court where different classes of claimants will vary and this makes it challenging to define an efficient system (Partlett 2011).

Many oil companies use 'self-insurance' method whereby they use their internal financial resources for compensations, and if they fall short, there is no payment. Operators use their own balance sheet to guarantee payment in case of a major accident (Faure 2003). Drawback is that companies first prefer to use major part of money for

recovering their own oil rigs and very little is left for covering marine environment cleaning cost. If they utilize Re-insurance scheme, it is used by multiple market stake holders to spread the aggregate of risk and guaranteed compensation, which diminishes the liability across the board. On top of this, Commercial insurance companies are not willing to provide insurance cover to the offshore companies due to the high risk nature of this work. They believe that the calamity of oil pollution is too huge to be covered by fair estimate of premium. Deepwater horizon case shocked the insurers. They were under impression that the BP's self-insurance will be able to cover all the cost, but when subcontractors and victims also filed claims, the insurance cover increased many folds.

As a reaction to circumvent this, some efforts were made by the effected fishing community in United states and Europe to recover marine pollution losses due to offshore operations under regular Tort law principles. It was done in hope that invoking Tortious civil liability rule can ensure some deterrence to oil companies. Without deterrence, operating companies employ perilous behavior, resulting in more costly accidents. Strong Civil liability is particularly important because it applies either negligence (fault-based) or strict liability (causation-based) rules. In the case of the offshore oil industry a strict liability regime will better achieve those goals due to many reasons. Strict liability regime boosts responsible behavior even if the regulatory regime is weak or incomplete or when regulators are biased due to personal political interests. It also guarantees financial resources for restoration & compensation efforts. Without such economic resources environmental effects may not be addressed and may worsen.

Offshore oil industry is risky and complex activity and the operating company holds the information required to evaluate the costs of accidents and prevention. If such companies are held liable for damages on a strict liability basis, they will have economic incentive to take cost-efficient precautionary steps. Strict liability also motivates operating companies to undertake optimal levels of precautions. On the other hand in negligence based regime, a likely polluter has no incentive to consider its safety measures, because so long as its behavior is not negligent an increase in the level of risky activity does not result in a conforming increase in the risk of liability. In contrast, under a strict liability rule, an increase in risky activity results in an augmented risk of liability. Operating companies therefore take into account in their risk-evaluation the extent of their activity under strict liability rule, but not under negligence rule. Hence companies will include the cost of probable liability into pricing of end products. This spreads the costs of compensation among consumers and provides the operating companies with a fund for cleanup and restoring the marine environment. Finally, in the case of offshore oil spills, administrative costs are expected to be lower under strict liability. Under strict liability, claims are generally simpler and quicker to evaluate because there is no need to prove negligence. negligence may be difficult to prove in oil spill cases and as a result fewer claims are filed and it is doubtful that cost of claims from offshore drilling accidents will indeed be less expensive. It can be hoped that that operators will use the utmost level of care if treaties provide Strict liability system of liability due to the inherent risks involved, and any deviation from this may be considered negligence. Judge Carl J. Barbier of the District Court of United states for the Eastern District of Louisiana in the Deepwater Horizon trial noted:

“A greater degree of care is required when the circumstances present a greater apparent risk.”

Using strict liability rule is not so new in environment damage cases. It was used and applied in Trail Smelter Arbitration between USA and Canada (smelter arbitration). Rationale of Strict liability is that it is usually imposed on ultra hazardous activities, in which offshore oil drilling operation is included. The same principle was later on put into International Convention for the Regulation of Whaling 1946, the International Convention for the Prevention of Pollution of the Sea by Oil 1954 and the Convention on Fishing and Conservation of the Living Resources of the High Seas 1958 (Yokota 1999). Shilliday (2007) comments on use of strict liability:

“The rationale for strict liability is that it shifts the loss from the innocent to the responsible State which, in view of its ‘presumed knowledge’ of the hazard created, is considered to be in a better position to decide whether or not the benefits of the activity are likely to outweigh its potential costs and provides a powerful incentive for the prevention of accidents.”

However, the critics say that strict liability rule simplifies matters for the claimants without any burden of proof and shifts all blame to the offshore operators, who are presumed guilty from the start. Drawback is that Oil companies will accept this principle only when there is no insolvency risk because they are more into saving money rather than fulfilling social and corporate responsibilities. But it is also a fact that many payments in Exxon Valdez case made on estimation of losses based only on negligence rule were too low to allow victims to rebuild their lives. After BP spill disaster, problem of weak legislation in United States forced the victims to look for other options for recovery of losses

which resulted in an agreement signed between President Obama and the oil company to set up a special Fund. BP pledged a minimum of \$20 billion to the fund over 40 months, with claims to be handled through the Gulf Coast Claims Facility (GCCF). Again, the administrator of the Fund did not estimate the compensation based on strict liability but on a standard that he himself had set up. This drew a severe criticism of this scheme and cases increased in courts under common law rule of strict liability instead of regional treaty. Result was setting up of another Trust management to settle claims of disgruntled claimants and yet again the trustees could not disburse costs until approved by the administrator or as directed by BP (Partlett 2011).

Marine Oil pollution cases in United states, United Kingdom and Norway also used 'Polluter Pays Principle' (PPP; it basically holds anyone liable that causes the pollution directly) The structure of some international Conventions (such as 1992 Convention for the Protection of the Marine called OSPAR) is very similar and based on the general precautionary principle and the polluter pays principle. This is a contested question in courts as to who is real polluter in offshore drilling. Is it licensee, operator, contractor or subcontractor? One solution found was 'Channeling of liability' theory in 1969 to make the registered ship-owner solely liable for the damage regardless of fault (Boyle 2005).¹⁸ It was extended to offshore facilities too to cover liability for marine oil pollution. But it is argued that 'Channeling Of Liability' in offshore oil pollution is unfair since it targets only the ship owners. E.g. under Norwegian Law 'Channeling Of Liability' is made very difficult against a licensee company unless the direct fault is established. In USA, Oil pollution Act (OPA 90) Sec. 6.5 lays the responsibility of offshore oil pollution directly on the license holder company. In United kingdom under OPOL "operator" is the responsible party , definition of which is: 9

" A Person which by agreement with other Persons has been authorized to manage, conduct, and control the operation of an Offshore Facility, subject to the terms and conditions of said agreement, or which manages, conducts and controls the operation of an Offshore Facility in which only it has an interest"

One more hurdle in getting just compensation for oil damage under the domestic jurisdictions is 'judgment-proof' cases. Judgement-proof is a technical rule of limiting the compensation for a specific company payments due to its limited resources . Limiting the assessment of damages to a specified fixed maximum amount can be misused by any oil company to hide behind lack of resources excuse to evade payments to the effected. The judgment-proof problem significantly diminishes deterrence and weakens the protection that the strict liability Rule pursues to implement. BPs wealth and ability to repay billions of dollars after the Deepwater Horizon spill masked this issue. But the judgment-proof problem may arise in future oil spills if the functioning company's total assets are rated less than the actual amount of damages. The possibility of this taking place increases in times of falling oil prices, when the value of some oil companies dramatically shrinks.

It is necessary that the treaties should require number of policy tools to mitigate problems e.g. compulsory insurance, vicarious liability rule for fixing liability on all facilitators , minimum asset-retention requirements, special taxation and adding some criminal liability. This is not new because criminal liability along with financial one has been incorporated into both U.S. and European legal regimes. To minimize the risk of judgment-proof parties international treaties should apply a stronger obligation of retaining minimum assets by oil companies along with compulsory liability insurance and added vicarious liability for parties who have some control over the polluter's behavior (i.e. lenders). practical hitches may prevent the implementation of all these tools, additional policies should be explored to address the problem during the time of diminishing oil company value, like requiring operating companies to deposit part of their profits into a compensation fund and encouraging small companies to merge and create a body with greater overall asset (Tamara 2017).

With this legal diversity in court rulings and companies taking advantage of it, there is need to let claimants find an international system that offers claimants one system of better services, and better compensation. Compulsory Risk pooling schemes under the international treaties may be more effective for settling claims fast because they are based on law of strict liability.

CONCLUSION

The rush to offshore oil and gas exploration and exploitation is not about to end. Forecasts show a continuing growth of production in traditional offshore regions e.g. Western Africa, Gulf of Mexico(PCF Energy, 2011). Therefore and significant development in new areas (such as Eastern Africa and the Eastern Mediterranean. Oil pollution should be

considered a grave socio-economic problem encouraging accountability and responsible risk management (Pike, 2013). A single comprehensive Universal treaty under United Nations like UNCLOS should oversee the offshore oil pollution problem. Under such a treaty the continental shelf zone where most offshore drilling is carried out can be better regulated in a broader meaning under UNCLOS 1982 because Exclusive economic zone under maritime law is beyond 200 km of the coastal state's sea. Having various treaties like at present overlap many issues, therefore one international treaty regulating the 10 offshore oil activities will be more beneficial and avoid regulatory replication (Zong). In fact USA took a very key step toward such legislation in 2018 (Dresser 2018) when congress passed the bill for making offshore drilling companies held exclusively responsible for all oil spills in an executive decision to allow 90% of United states continental shelf for oil and gas exploration at Maryland sea coast.

Based on the analysis within this article, an appropriate (and urgently required) legal regime recommended can be as follows.

1. One global treaty for offshore oil facilities is long overdue .Single set of treaty regulation should be promoted under civil liability rule and compensation due to pollution damage resulting from offshore drilling activities (Rochettee & Wright 2015). The stalled meetings of IMO on this should be restarted on urgent basis. Joint UNEP/IMO initiative will be a good platform for all nations to join. 2.majority of the offshore oil facilities around the world are outside the territorial waters or are located on the continental shelf of coastal state which may also be in the Exclusive Economic Zone of that state. UNCLOS 1982 allows states to claim up to 200 nautical miles from the baseline whereas the continental shelf can stretch further depending on the geology .oceans and seas do not exist separate from each other and are all intertwined in many parts of the world ,there cannot be imaginary lines to divide them into regions(Agyebeng 2006). The new global treaty can allocate the areas of offshore facilities under compulsory jurisdiction of one authority established as treaty organization for claim settlements. This will wipe away effects of weak domestic laws of coastal states.

3. the new treaty should be based on a uniform response guideline from all state parties under strict civil liability regime and backed by a compulsory liability insurance scheme (perhaps up to USD \$1 billion) to be tied with an industry-funded liability pool . In the absence of negligence, leaving the loss where it fell would be unreasonable and unfair. It has been stressed that the “strict liability doctrine should be utilized in public international law because the concept is now accepted in nations throughout the world.” (Churchill 1999) This can provide a more suitable and operative tool for large-scale environmental accountability in oil related environment damage arising from offshore facilities because environment effects spread across oceans once a blowout occurs in deep sea. The fund amount should be based on financial cost risk estimation for human health and marine living resources. 4.In case of an accident, the party to be held liable should be clearly identified in the global treaty because in offshore facility, the owner is not the operator, but it is the permittee /lessee company or easement holder in whose area the facility is operating. Technological advancement and the increase in demand for petroleum products will essentially increase in offshore operations leading to an increase of the pollution risk such activities pose to the marine environment. To cater for the extraordinary events imposing some corporate criminal liability upon oil companies with weak risk management facilities or questionable corporate culture will not be bad idea.(bosma) .

References

- Agyebeng, Kissi,(2006) .Disappearing Acts – Toward a Global Civil Liability Regime for Pollution Damage Resulting from Offshore Oil and Gas Exploration . *Cornell Law School Graduate Student Papers*.
- Appenzeller, T. (2004). The end of cheap oil. *National Geographic*. Accessed 16 Oct 2018
- Bosma ,Shane (2012).The Regulation of Marine Pollution Arising from Offshore Oil and Gas Facilities - An Evaluation of the Adequacy of Current Regulatory Regimes and the Responsibility of States to Implement a New Liability Regime .26 *Austl. & N.Z. Mar. L.J.* 89 (2012)
- Boyle A.E.(2005) .Globalising Environmental Liability: The Interplay Of National And International Law. *Journal of Environmental Law* Vol 17 No 1
- Burger, J. (1997). Oil spills. *New Brunswick, N.J:* Rutgers University Press.
- Chabason L., (2011), Offshore oil exploitation: a new frontier for international environmental law, Working Paper No11/11, *IDDR*, 9p.

- Commission Staff Working Paper, Impact Assessment, Accompanying the document, Proposal for the Regulation of the European Parliament and of the Council on Safety of Offshore Oil and Gas Prospection, Exploration and Production Activities, SEC (2011) 1293, p 9
- Convention for the Protection of the Marine Environment of the North Atlantic 1992, 32 ILM 1069(OSPAR)
- Daniel b. Shilliday &Othrs.(2007). Contractual Risk-Shifting in Offshore Energy Operations . 81 *Tul. L. Rev.* 1579
- Dresser, M. (Mar,2018). Maryland lawmakers vote to impose strict liability for offshore oil spills. *TCA Regional News*
- Exxon Shipping Co. v. Baker ,554 U.S. 471 (2008)
- Faure, M & Ton Hartlief,(2003) Insurance And Expanding Systemic Risks, Policy Issues In Insurance, 144
- Faure, Jing& W. Hui .(2015) A Multilayered Approach To Cover Damage Caused By Offshore Facilities. 33 *Va. Envtl. L.J.*356
- <https://www.theguardian.com/business/2018/jan/16/bps-deepwater-horizon-bill-tops-65bn> Retrieved 13/9/2018
- Humphrey Douglas, (2011)Gulf of Mexico Oil Spill: Likely Impact on UK Regulation and Contractual Arrangement"s, 22 *ENERGY & ENVT* 241
- IMO rule no. 1 & 3 in Guidelines for applications of Annex I of MARPOL for FSUs and FPSO ,MEPC circular no. 406. 2003
- INT'L MAR. ORG. *IMO doc LEG 99/13/1*, 16 - 20 April 2012.
- Investopedia <https://www.investopedia.com/investing/worlds-top-oil-producers>. Retrieved 13/9/2018
- Julien Rochette, Glen Wright.(2015). Strengthening the international regulation of offshore oil and gas activities". *IDDDRI Institut du développement durable et des relations internationales, Sciences Po, Paris*
- Kashubsky, Mikhail, (2007) Marine Pollution from the offshore and Gas Industry: Review of major conventions and Russian Law. 152 *Maritime Studies* 1.
- Lotner Lev, Tamara. (2017) Liability for Environmental Damages from the Offshore Petroleum Industry: Strict Liability Justifications and the Judgment-Proof Problem" (January 1, 2017). 43 *Ecology L.Q.* 483 (2017); *Ecology Law Quarterly*, Vol. 43, No. 2, 2017. Available at SSRN: <https://ssrn.com/abstract=2935524>
- OCS Platform Activity 201942202013
- http://www.bsee.gov/uploadedFiles/BSEE/Newsroom/Offshore_Stats_and_Facts/final.pdf .retrieved 15 oct 2018
- Office, U. S. Government Accountability GAO REPORT (FEB 2000). Marine Pollution: Progress Made to Reduce Marine Pollution by Cruise Ships, but Important Issues Remain. *GAO-RECD-00- 48*
- Overview of Interviews with Stakeholders. (2016) in Faure,M (Ed.), Civil Liability and Financial Security for Offshore Oil and Gas Activities (pp. 406-407). *Cambridge: Cambridge University Press.*
doi:10.1017/CBO9781316711583.011
- OPOL Insurance Forms FR-1G, FR-2G. Rules 2017 ,available at <http://www.opol.org.uk/downloads/OPOL%20Rules%20-%202021%20June%202017>
- Partlett, D. F., & Weaver, R. L. (2011). BP oil spill: Compensation, agency costs, and restitution. *Washington and Lee Law Review*, 68(3), 1341-137.accessed 21.11.2018
- PCF Energy Report (2011). Importance of the Deepwater Gulf of Mexico.
- Pike, W.J. (2013). High crude oil prices sustainable production, spur new discoveries, *World Oil Magazine*, 234, p.1.
- Quest Offshore Resources Report(2011) .An in-depth study of the outlook of the industry investment flows offshore..Prepared for: *American Petroleum Institute (API) National Ocean Industries Association (NOIA)*
- Churchill R.R. & Lowe A.V., (1999)"*The Law Of The Sea*" 358 (Manchester: Manchester University Press
- Smelter Arbitral Trib., 3 U.N. Rep. *Int'l Arb. Awards* 1905 (1941)
- United Nations Convention on the Law of the Sea (UNCLOS), PART XII Articles 192-233 (Protection And Preservation of The Marine Environment) , Dec. 10, 1982, 1833 U.N.T.S. 3.
- Yokota, Y. (1999). International justice and the global environment. *Journal of International Affairs*, 52(2), 583-598. accountid=29004
- Zong, A. (2013) "Liability regime concerning the oil pollution rising from off shore facilities". Master thesis, *University of Oslo, Faculty of Law.*

Biography

Misbah Saboohi is a senior law lecturer at College of Law of Prince Sultan University Riyadh KSA. She is LLB graduate with honors and Gold Medal from Pakistan .Later she earned her LLM in international commercial law and contracts from prestigious University of Cambridge UK. She has published many law related articles for journal and conference papers. Ms Misbah has research interests in International law, environment issues ,Human rights and conflict resolution. Ms Misbah is also qualified Lawyer with license from Islamabad Bar. She is in Law academics since 1995 and has taught Law in Pakistan, Malaysia and now Saudi Arabia. She has also been an active member of Law related NGOs for gender rights, Islamic law, media freedoms.