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Global Offshore Energy Installations: Implications for Environmental Pollution Liability Insurance in Relation to Major Oil Spill Incidents

Dr. Kyriaki Noussia*

Abstract

Post the Deepwater Horizon (DWH) incident, offshore energy insurance underwriters reassessed their risk exposures in response to newly perceived operational risks involving blowouts, fires, explosions, lost control of well and other non-hurricane risks. Already in the aftermath of the DWH incident, it has been noted that it would be crucial to consider the willingness of the global offshore energy insurance market to participate in efforts to establish and fix a new liability limit for environmental pollution liability insurance. In relation to the approach followed by the USA administrations, this has been fragmented, with the current administration in office introducing a moratorium on new oil and gas leasing on federal lands and waters and in terms of its policy relating to its climate agenda. Against this background, this article describes the insurance implications of environmental pollution liability in case of offshore drilling operations incidents (such as the DWH) resulting in major oil spills. In doing so it discusses in detail the legal framework and the position in the EU and draws a comparison with other jurisdictions. It also contains proposals for future measures so as to be able to offer better insurance coverage for such offshore drilling disasters, such as the introduction and collection of data on damages, or an EU wide and an international agreement especially focusing on offshore-related incidents with a transboundary character, as well as a mechanism to facilitate early compensation payments to potentially vulnerable victims.

Keywords: Oil spills; Deep Water Horizon; Environmental pollution, Environmental pollution liability, Offshore oil and gas; environmental pollution liability insurance

1 The Status of Offshore Energy Insurance for Oil Spills Post the Deepwater Horizon (DWH) Accident

Following the DWH incident, and during the last decade or so, there is a pertinent practical need for the global offshore energy insurance market to allocate a new liability limit for environmental pollution liability insurance, able to be reciprocally correlated with the ability of such global markets to provide sufficient and appropriate insurance coverage for offshore energy installations. The extent of the market's capacity to adequately and to appropriately insure future spills will not only entail the proven ability of global markets to provide the needed insurance coverage for offshore energy installations, but it will also depend on the insurability of such hazards and the general ability of the global financial market to insure catastrophes and oil spill risks.¹ Notably, post the DWH accident, offshore energy insurance underwriters reassessed their risk exposures in response to newly, at the time, perceived operational risks, involving blowouts, fires, explosions, lost control of well and other non-hurricane risks. This has led to some controversy and instability in the market, as, in many

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¹ R.O. King, 'Deepwater Horizon Oil Spill Disaster: Risk, Recovery, and Insurance Implications', (12 July 2010) Congressional Research Service, 7-5700, R41320, Summary, 14-20.

cases, the market has shifted from being a “soft” market, able to offer proper such insurance coverage, to being a “hard” one, whereby the willingness and capacity to insure is scares, or premiums are so high that they are uneconomical for the assured.

This article describes the insurance implications of environmental pollution liability in case of offshore drilling accidents - such as the DWH accident. It also involves a discussion of the current and previous status of the environmental pollution liability regime; of the evolution and characteristic features of environmental insurance - and more specifically of the specific insurance issues raised in case of major oil spill accidents; of the initiatives taken, as well as of any proposed and existing best practices and regulatory approaches in the EU and in some other jurisdictions; and of any proposals for future measures to better address and better insure such offshore drilling disasters.

1.1 The Position in the USA – The policy regarding oil and gas drilling

In the USA, already at the time of the Obama administration, it had been outlined that any new drilling regulations should be aimed at preventing a repeat of the 2010 DWH disaster in the Gulf of Mexico. As a result of the above initiative, in January 2017, the EPA introduced several changes to companies’ risk management plans. Contrary to the above, the Trump administration proposed to roll-back the offshore drilling safety regulations so as to ease restrictions on fossil fuel companies and generate more domestic energy production, in an effort also to reduce “unnecessary burdens” on the energy industry. The proposal would also delay some of the compliance dates of the Obama-era amendments and cancel certain provisions that address accident prevention. Such a proposal was under public consultation until the middle of June 2018. The Biden Administration, following its promises and campaign introduced a moratorium on new oil and gas leasing on federal lands and waters and saw this as a policy forming a key part of its climate agenda. On January 27, 2021, an “Executive Order On Tackling the Climate Crisis At Home and Abroad” was issued,² urging the US and the world to react to the profound climate crisis that we are facing and take immediate and effective national and international action to halt and avoid the catastrophic impacts of that crisis. The executive order mentioned that any domestic US action must go “hand in hand” with US international leadership so as to enhance global action. Section 208 mentioned that “ To the extent consistent with applicable law, the Secretary of the Interior shall pause new oil and natural gas leases on public lands or in offshore waters pending completion of a comprehensive review and reconsideration of Federal oil and gas permitting and leasing practices in light of the Secretary of the Interior’s broad stewardship responsibilities over the public lands and in offshore waters, including potential climate and other impacts associated with oil and gas activities on public lands or in offshore waters.”³ The 27.1.2021 executive order⁴ means that the Biden administration is stopping the permission for new oil and gas leasing on federal

² The White House, Executive Order on Tackling the Climate Crisis at Home and Abroad, <<https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/executive-order-on-tackling-the-climate-crisis-at-home-and-abroad/>> (accessed 20. Oct. 2022)

³ *Ibid.*, section 208.

⁴ *Ibid.*

onshore lands and offshore waters “to the extent consistent with applicable law”, i.e. not including existing operations or permits for existing leases, or private lands.⁵

It is notable that the proposed increase in the limit of liability required under the Oil Pollution Act (OPA) carried at least four of its elements and consequences in the offshore energy insurance and reinsurance market: a) first, ‘operators’ extra expense’ (OEE) and ‘excess liabilities’ coverage had to be prioritized in terms of a single limit before the balance of the OEE insurance limits used for pollution clean-up and containment of oil spills; b) second, given the enormity of the BP oil spill coverage has since been at a much higher premium; c) third, private commercial insurers were expected to not be the same willing to commit financial capital in underwriting unknown new risks, if no extra high premiums were to be agreed, for, in effect the BP oil spill has triggered a ‘hard’ energy insurance market involving scarcity of coverage and high prices; d) fourth, many insurance market experts supported a more efficient pre-disaster risk financing approach to managing and financing large-scale oil spill disasters through ‘reinsurance sidecars’, catastrophe bonds (‘CAT bonds’) or energy insurance financial futures and options.⁶

1.1.1 The Current “Status Quo” and Evolution of the Environmental Pollution Liability Regime – Lessons Learned from Case Law

The ramifications of the DWH oil spill were tremendous and caused congressional consideration on issues such as (1) environmental damage; (2) the allocation of the cost of oil pollution clean-up; (3) disaster victim compensation; and (4) future oil spill prevention, response, and recovery.⁷ A key element was thought to have been the limit on liability for operators of offshore energy facilities and the amount of third-party liability insurance available from the commercial insurance market to meet operators’ demand for coverage to satisfy existing governmental requirements.⁸ Preventive measures limited in time or space were also required as primary in consideration in line with the ‘precautionary’ principle.⁹

Case law, in the USA, such as *D.C. Operating Co., LLC v Indian Harbor Insurance Co.*,¹⁰ brought into the limelight the fact that claims made under modern pollution coverage pose the risk of exclusion of the entire risk when a claim is filed. The issue at stake here is centred around the fact that, because of the idiosyncratic character of gradual and over time occurrence of environmental pollution, the insurance coverage sought for and purchased by default includes existing contamination, to cover for additional undetected contamination which might surface. Such a necessity of insuring also for existing contamination has also derived as imperative due to the fact that legal questions on the extent of insurance coverage to existing or future spills has often been litigated, and the solution of ‘post-claim underwriting’ has often resulted in nullifying coverage and insurers’ liability, with case law such as *John R. McKenzie*

⁵B.Cahill. Biden Makes Sweeping Changes to Oil and Gas Policy, CSIS, <<https://www.csis.org/analysis/biden-makes-sweeping-changes-oil-and-gas-policy>>, 28.01.2021, (accessed 20. Oct. 2022)

⁶ *Ibid.*

⁷ *Ibid.*

⁸ U. Magnus, ‘Closing Remarks’ in J. Basedow and U. Magnus (Eds.) *Pollution of the Sea – Prevention and Compensation*, Hamburg Studies on Maritime Affairs, Vol. 10, (Berlin, Heidelberg, New York: Springer 2007) 181-183, 181.

⁹ *Ibid*

¹⁰ *D.C. Operating Co., LLC v Indian Harbor Insurance Co.*, Decision and Order Granting in Part and Denying in Part Defendants’ Motion to Dismiss the Complaint, No. 07-CV-0116 (S.D.N.Y. Mar. 27, 2007).

*Jobber, Inc. v Mid-Continent Casualty Co.*¹¹ and *Viacom International, Inc. v Admiral Ins. Co.*¹² serving as evidence to this. Resorting to CGL policies to cover such claims provides no guarantee as the courts will interpret the policy language and wording employed. The lessons learned from *Viacom International*¹³ are positive, for the court here allowed the ‘other insurance’ provision in the EIL policies to provide environmental coverage as an add on to a general insurance¹⁴ cover, however, there is no such guarantee, and the legal precedent is not undoubtedly set in this respect.¹⁵

The insurance coverage for environmental accidents, which is being offered in the market, including environmental accidents caused due to major oil spills, aims, nowadays, to contain specific wording to capture and cover the idiomorphs of the risks involved. The impact of natural disasters of the 21st century have profoundly affected the property damage and business interruption insurance markets, and the claims arising from the property owner’s environmental liabilities in the case of environmental incidents such as the DWH. Environmental liabilities include site contamination because of structural defaults and repercussions (e.g., structural collapses, explosions or contaminations) usually covered in pollution liability policies - as opposed to the traditional coverage offered by ‘Environmental Impairment Liability’ (EIL) policies - and they also cover on-site bodily injury, property damage and first-party clean-up costs, as well as third-party claims for bodily injury, and legal defence expenses arising from third party claims.¹⁶

Most often, the established liability regime in global use, in respect of pollution offshore emanating from the subsurface or from the well - including control of the well, clean up and third-party liability, is the “mutual hold harmless” (MHH) or “knock for knock” indemnities regime, which aims to identify and mitigate the very substantial risks that the contracting parties face in offshore petroleum operations and, also, to enable the parties to avoid having to obtain multiple and overlapping layers of insurance. This “mutual hold harmless” (MHH) or “knock for knock” indemnities regime, is incorporated into industry model form services contracts, such as the U.K.’s LOGIC contracts or the US IADC standard contracts¹⁷, as per which the operator takes responsibility for loss or damage to the operator or the property of the operator’s other contractors, personal injury to operators or employees of the operator’s contractors, and loss or damage suffered by third parties (mostly in relation to the performance of the contract, or in relation to contractor negligence, or, for loss of or damage to third party production facilities or pipelines). The contractor usually takes responsibility for loss or damage to its property, and / or personal injury to its employees arising from performance of the contract and pollution and/or contamination caused by its equipment. Neither party is liable for the other if the personal injury or loss or damage to property concerns a third party and is

¹¹ *John R. McKenzie Jobber, Inc. v Mid-Continent Casualty Co.*, No. 07-214, 2007 U.S. Dist. LEXIS 84169 (M.D. Fla. Nov. 14, 2007).

¹² *Viacom International, Inc. v Admiral Ins. Co.*, No. L-1739-99 (N.J. Super. Ct. App. Div. April 21, 2006) (reprinted in 19-9 Mealey's Poll. Liab. Rep. 21 (2006)).

¹³ *Ibid.*

¹⁴ K. Noussia, 'On Modern Threats to Environmental Sustainability in the Arctic: The Cybersecurity Factor and the Provisions of Insurance Against Environmental and Cyber Risks in Oil and Gas Installations', (2020), 29, *European Energy and Environmental Law Review*, Issue 4, pp. 112-126, 118, <https://kluwerlawonline.com/JournalArticle/European+Energy+and+Environmental+Law+Review/29.4/EELR2020035>

¹⁵ *Ibid.*

¹⁶ R. Horkovich, R. Hertzog, P. Halpin, ‘Site Pollution Liability Insurance’, pp. 515-533, in D. Guevara, F. Deveau (Eds.), *Environmental Liability and Insurance Recovery*, ABA 2012.

¹⁷ The International Association of Drilling Contractors produces a number of standard form drilling contracts, available at <https://store.iadc.org>

caused by the negligence or breach of duty by the other. However, a cap is imposed upon the contractor's liability to third parties, but no such cap is imposed upon the operator. The enduring popularity of the above regime lies in the business benefits it brings, such as the reduced costs of litigation and insurance but depends on the creditworthiness of the parties.¹⁸

However, such a regime has been challenged and received criticism, following the DWH, as it was considered superfluous for the operator to rely on a service company to bear some costs, following a detrimental to the environment incident. Hence, post-DWH insurers have been nervous to provide cover for contractor liability risk, as the latter has been underwritten in the market previously, primarily owed to the fact that the costs entailed in the DWH have demonstrated that there can be over \$1 billion claims, and the markets' capacity has been well below this figure; and secondly because of the existence of general exclusions attached to catastrophic risks from oil well explosion incidents (e.g., blowout, pollution) which were classified as operator risks able to be claimed by the contractors.¹⁹

In the European geographical area and jurisprudence case law has also shown the need to define oil spills and have pertinent measures to mitigate losses and assert liability as well as compensate and restore the damage incurred. The ECJ in the case resulting from the Erika oil spill incident *Case C-188/07 Commune de Mesquer v. Total France SA and Total International Ltd*²⁰ on whether oil accidentally spilled at sea following a shipwreck is "waste" for the purposes of Directive 75/442/EEC on waste, such that Total International and Total France should be liable for the cost of disposal as 'previous holders' or 'producer of the product from which the waste came', and it was held that it was asserted as "waste" and as such the holder of the waste was liable for the cost of disposing of it. The *ERIKA* proceedings in the French courts gave rise to numerous questions regarding the interaction between the international oil pollution liability conventions as incorporated into French law. The legislation considered relevant includes the CLC 1992, the Montego Bay Convention of 1982, the MARPOL Conventions of 1973 and 1978 and national law such as Article 8 of the Law of 5 July 1983 criminalising "damage to" – and not "damage in" – territorial waters and Article L.113-12 of the French Penal Code establishing that French law applies to infractions committed outside of territorial waters as long as international conventions permit. The Courts in France, applied an interpretation of the international conventions as drawing the rights of jurisdiction to rule on criminal liability for oil pollution damage to French territorial waters where, as here was the case, the damage was considered 'severe' – even if this as a threshold is not immediately derived from the legislation wording. It is notable that even if the CLC 92 applies to damage caused in territorial waters of a contracting state by oil pollution from tankers, the French court applied the Convention on the Limitation of Liability for Maritime Claims (LLMC) of 1976 which provides for limitation of liability for various categories of maritime claims, but not claims for damage caused by pollution of oil carried as cargo.²¹ The emergence of oil spills at different times and geographical areas has prompted laws to be enacted in the USA and in the EU. The Erika oil spill vastly engaged public concern and prompted the EU to adopt the Erika I and II packages, acting as a drive for Single Hull Tanker Regulations. Since the Erika and the DWH incidents the EU has focused on introducing

¹⁸ R. Horkovich, *supra* note 16.

¹⁹ P. Cameron, 'Liability for Catastrophic Risk in the Oil and Gas Industry', I.E.L.R. 2012, 6, 207-219, 209-210.

²⁰ *Case C-188/07 Commune de Mesquer v. Total France SA and Total International Ltd* ECLI:EU:C:2008:359

²¹ Jérôme de Sentenac, Jean-Philippe Maslin, A sea change: the French Government rethinks its oil pollution legislation post-ERIKA, <https://www.gard.no/web/articles?documentId=20739733> (accessed 30 November 2022)

measures to minimise the risk of major offshore oil and gas accidents occurring. One example is the Environmental Liability Directive or the European Waste Framework Directive.

2 The Environmental Pollution Insurance Regime

2.1. The Structure of the Offshore Energy Insurance Market

The offshore energy insurance market is a highly specialized one, and the fact that the insurance able to be offered has to be capped to the excess of \$1 billion, the risk exposure is usually multi-covered by many insurers. This results in operators of offshore drilling units and related assets to insure them for property and liability risk exposures on a subscription basis, via special insurance which is placed in the London and Bermuda insurance markets. This has further caused premium reductions as the necessity of having many smaller underwriters, as opposed to larger underwriting units of the past, and relying on technical analysis to evaluate risk and to quantify any related occurring exposures.²²

2.2. Specific Insurance Issues Raised by Major Oil Spill Accidents

Accidents such as the DWH oil spill raise a number of insurance issues, such as the insurability of the incident *per se* as well as of the kind of damages sustained as well as the issue of whether liability for environmental losses sustained should be capped or not. This was left undecided prior to the House of Lords in *Wasa International Insurance Co Ltd v Lexington Insurance Co*,²³ whereby insurers were held liable for losses that had occurred both before and after the policy conclusion policy. In the Court of Appeal²⁴ Longmore LJ held that the only question to be decided was whether the reinsurers - on the basis of a proper construction of the wording of the cover, had assumed the same risk as the insurers, which he held to be the case. Sedley LJ, by contrast, stated that reinsurance was by its nature a form of liability cover and not a further policy on the direct risk. On appeal to the House of Lords, their Lordships endorsed the view that reinsurance was not liability insurance at all, but it constituted a further insurance on the original subject matter, and that it was open to the parties to frame their contract as one on liability.²⁵

Following major offshore incidents, various financial and insurance instruments might be available to cover liability risks. Often, a practical problem encountered in relation to coverage is the fact that the more capacity is used for first-party damage, the less may be available for liability and vice versa. A solution to the above conundrum is provided via the mechanism of self-insurance, provided by larger in capacity underwriters, allowing its use as *ultimum ratio*, with operators using the reserved in their balance sheets to guarantee payment in case of a major oil spill occurrence, or via the establishment of a captive acting as a *de facto* insurance

²² R.O. King, *supra* note 5, 7-9.

²³ *Wasa International Insurance Co Ltd v Lexington Insurance Co* [2009] Lloyd's Rep. I.R. 675, reversing [2008] Lloyd's Rep. I.R. 510.

²⁴ *Wasa International Insurance Co Ltd v Lexington Insurance Co* [2008] Lloyd's Rep. I.R. 510, reversed [2009] Lloyd's Rep. I.R. 675.

²⁵ R. Merkin, *Colinvaux's Law of Insurance*, (London: Sweet & Maxwell, 11th ed. 2016) para 18-004.

company with each operator managing their own captive and related risks.²⁶ The usual content of insurance coverage for offshore activities pertains to coverage for: a) ‘offshore physical damage coverage’ for physical damage and liability exposure, b) ‘environmental/pollution liability’ for bodily injury, property damage and clean-up costs, c) ‘business interruption / loss of production income’ for business losses from business interruption, d) ‘comprehensive general liability’ for bodily injury or property damage to a third party and e) ‘worker’s compensation / employer’s liability’ for claims due to employees’ injuries or deaths at work on-site.²⁷ Often enough, such coverage will be mainly underwritten as property damage with additional coverage purchased for casualty coverage for clean-up and third-party liability, usually only one limit, and this can pose: a) capital adequacy problems for third-party liability claims, as there might be no more funds available once claims for pollution damages are processed; and b) funds accuracy problems, as caps might entail the non-adequate allocation of the actual damage incurred. The advantage in the existence of such caps is that they allow for reasonable premiums and, hence, for the insurance market to be retained as a “soft” and affordable one.²⁸ However, the reality is that post the DWH incident the re-insurance market was faced with pressure on raising premiums, and the fear of a spiral in losses due to accumulation of claims, meant that available capacity was reduced for offshore installations, ultimately leading to a ‘hard’ insurance market with either no available cover or extremely high premiums. This has reiterated the discussion that insurance should not be seen as a mechanism for unlimited coverage and that the figures representing the capacity of the insurance market are not always able to depict future available coverage.²⁹

2.3 Special Features of Environmental Insurance

Initially property and casualty insurers offered ‘Comprehensive General Liability’ (CGL) insurance, for liability from accidental or unexpected and unintended property damage or bodily injury incurred during the policy period, even if any claim was subsequent to the incident incurred³⁰; however the practice of adding ‘qualified’ pollution exclusions for bodily injury or property damage unless sudden and accidental, was later on established, only to be followed by ‘absolute’ pollution exclusion in CGL policies in the late 1970s,³¹ and it was in the 1990s that new environmental insurance products were marketed to cater for coverage from environmental pollution liability of large scale, including the cover for clean-up costs.³² The interpretation of the word “sudden” in policy wording for pollution events has meant that the wording was not fit for the gradually occurring environmental losses.³³ In *Pacific Chemicals Pte Ltd v MSIG Insurance (Singapore) Pte Ltd*³⁴ it was held that the phrase ‘any unforeseen and sudden physical loss destruction or damage’ meant that the damage had to be sudden and

²⁶ M. Faure, H. Wang, ‘The Use of Financial Market Instruments to Cover Liability Following a Major Offshore Accident’, p. 237, in M. Faure, *Civil Liability and Financial Security for Offshore Oil and Gas Activities*, CUP, 2016.

²⁷ *Ibid.*, pp.250-251.

²⁸ *Ibid.*

²⁹ M. Faure, H. Wang, *supra* note 26 at. 236-261.

³⁰ M. Plumer, A. Lathrop, and K. Suomela, ‘Environmental Insurance Claims: The Second Generation’ in *New Appleman on Insurance: Current Critical Issues in Insurance Law* (Lexis Nexis, Spring 2010), 39-64, 39-40.

³¹ *Ibid.*

³² Plumer et al., *supra* note 30 at 39-64, 39-40.

³³ *Ibid.*

³⁴ *Pacific Chemicals Pte Ltd v MSIG Insurance (Singapore) Pte Ltd* [2012] S.G.H.C. 198; see also *Australia Paper Manufacturers Ltd v American International Underwriters* [1994] 1 V.R. 685.

accidental, rendering irrelevant that the peril which had caused the damage itself materialized slowly.³⁵ As case law in this respect is not settled, any interpretation is varied as per the particular coverage implicated each time and whether the incident has not arisen during the policy period. As environmental pollution liability is issued where: (i) the loss is known, but the extent of the loss is not (cost cap); or (ii) the liability causing event has already happened, but the policyholder simply does not know the extent of contamination³⁶ policy wording may be difficult to interpret the exact scope of insurance coverage.³⁷

3 Initiatives Taken, Best Practices, Regulatory Approaches

In terms of environmental pollution liability and insurance ramifications the DWH accident was a ‘market-changing’ one. Some argued that price increases would be modest³⁸ and that the event would not trigger a persistently hard market in offshore energy insurance.³⁹ In any event, governmental regulators launched various initiatives, a few of which are being reviewed below.

³⁵ *Vee H Aviation Pty Ltd v Australian Underwriting Pool Pty Ltd* unreported December 1996, (ACT); In *Pacific Chemicals* [2012] S.G.H.C. 198 itself the subject-matter insured was phthalic acid stored in a heated tank. The assured shut down the plant temporarily and transferred molten acid from the tank to a heated tank truck, but due to a malfunctioning gauge on the tank some 376 metric tonnes of acid was left in the tank and it solidified. In addition, the drop-in temperature caused a blockage in a vent line leading from the tank, leading to pressure building up inside the tank and the bucking of its walls. The Singapore High Court held that the assured would be able to recover if it could show that the solidifying of the acid and the buckling of the tank were “unforeseen” and “sudden”; See R. Merkin, *supra* note 23, para 20-055.

³⁶ *D.C. USA Operating Co., LLC v Indian Harbor Insurance Co*, Decision and Order Granting in Part and Denying in Part Defendants’ Motion to Dismiss the Complaint, No. 07-CV-01116 (S.D.N.Y. Mar. 27, 2007) highlights an issue likely to arise when claims are made under modern pollution coverage. In many instances, policyholders purchase pollution coverage precisely because the detection of contamination at a site suggests that there may be more as yet undetected contamination. Policyholders must examine the language of their policies closely before purchasing it to ensure that insurers have not attempted to exclude the entire risk for which the policyholder seeks coverage and will pay a premium. Policyholders also must be cognizant of the risk of pollution insurers conducting ‘post-claim underwriting,’ relying on statements from historical site assessments - reviewed by the insurer for the first time after a claim is made - to contend that the policyholder did not disclose important information in its application. An example of this is *John R. McKenzie Jobber, Inc. v Mid-Continent Casualty Co.*, No. 07-214, 2007 U.S. Dist. LEXIS 84169 (M.D. Fla. Nov. 14, 2007). Policyholders are likely to encounter similar arguments from their insurers when making claims under policies covering sites at which there has been a history of environmental investigations and even past remediation. The purpose of environmental assessment reports is to identify potential contamination that may exist at a site. Thus, such reports are likely to be fertile ground for statements that an insurer may seek to use against the policyholder after a claim is made, even if the insurer failed to review these same reports during the underwriting process; M. Plumer et al., *supra* note 28 at 39-64, 39.

³⁷ M. Plumer et al., *supra* note 30 at 39-64, 39; K. Noussia, ‘On Modern Threats to Environmental Sustainability in the Arctic: The Cybersecurity Factor and the Provisions of Insurance Against Environmental and Cyber Risks in Oil and Gas Installations’, (2020), 29, *European Energy and Environmental Law Review*, Issue 4, pp. 112-126, 115-117,

<https://kluwerlawonline.com/JournalArticle/European+Energy+and+Environmental+Law+Review/29.4/EELR2020035>

³⁸ As of May 26, 2010, Lloyd’s estimates net claims from Deepwater Horizon loss at between \$300 and \$600 million. Richard Ward, Lloyd’s CEO: ‘These figures are our estimate of the market’s total exposure...The event in the Gulf of Mexico is still developing.’; Towers Watson August 2010; Marsh Energy Monitor July 2010; Willis Energy Market Review (EMR) newsletter May-June 2010; Wall Street Journal 05/25/10; Credit Suisse Research Note 05/11/10.

³⁹ Towers Watson, Marsh Energy Monitor, Willis EMR, Wall Street Journal, Credit Suisse Research Note, *supra* note 38.

3.1 United Kingdom

Following the DWH accident, an Oil Spill Prevention and Response Advisory Group (OSPRAG) was established in May 2010 to provide a focal point for a review of industry practices. This was a joint government-industry body which reviewed regulation and arrangements for oil spill prevention and response and the adequacy of financial provisions in relation to a UCS response. Indemnities and insurance were matters which OSPRAG specifically looked at, and it finally recommended the creation of an Oil Spill Response Forum to be governed by Oil & Gas UK.⁴⁰

Its other principal recommendation was the development of the OSPRAG capping device. The UK House of Commons Energy & Climate Change Select Committee (HC Committee) made recommendations in relation to the liabilities and compensation costs that can arise from oil spills. These concerned among other things the OPOL limit and coverage, but also clarity on liability and the ability to pay for an accident. The OPOL limit was substantially increased from US \$120 million to US \$250 million.⁴¹

In 2011 a Review Panel was set up in the UK to review findings of official investigations into the circumstances surrounding the DWH accident. Although the Panel was to focus principally on safety-related regulatory issues, it considered also insurance implications of the accident.⁴²

The Panel were concerned that a mechanism should be in place for rapid distribution of compensation after an oil spill had taken place and sought clarification as to who would consider claims and authorise payments. The Department of Energy and Climate Change (DECC) advised that the Operator should administer the funding of all activities. If the operator defaulted, then OPOL would step in. However, during discussions with industry representatives, it was clear that there were no set procedures in relation to claims and it was recognised that guidance and good practice on such mechanisms should be an area considered as part of the current work underway under the auspices of Oil Spill Prevention and Response Advisory Group (OSPRAG) and the Indemnity and Insurance Review Group (IIRG).

The insurance industry expressed the view that work should be done to ensure that OPOL has appropriate mechanisms in place to deal with claims in the event of an incident in an effective and timely manner.⁴³

The Panel recommended that liability and insurance issues should be taken forward as a matter of urgency and that a clear claims and compensation procedure would have to be adopted by all operators, taking into account the evaluation that is to be carried out of the Gulf Coast Claims Facility once all claims in relation to Macondo would have been paid out.⁴⁴

⁴⁰ Oil & Gas UK is a not-for-profit enterprise, which functions as a trade organisation for the UK offshore oil and gas industry.

⁴¹ P. Cameron, *supra* note 19 at 207-219, 216-217.

⁴² Department of Energy and Climate Change, 'Offshore oil and gas in the UK: an independent review of the regulatory regime' (December 2011, U.K.) (accessed 14 June 2018) <https://www.gov.uk/government/publications/offshore-oil-and-gas-in-the-uk-independent-review-of-the-regulatory-regime>.

⁴³ *Ibid.*

⁴⁴ *Ibid.*

Other actions taken by the UK to bolster its regulatory regime post DWH include an increase in environmental inspectors and inspections on mobile rigs. A response from the Energy and Climate Change Committee stressed inter alia that the Offshore Pollution Liability Association limit of \$250 million was insufficient and covered only direct damage.⁴⁵

3.2 European Union

Insurance is a mechanism used effectively to transfer the risk of environmental damage caused by industries across the EU, but it cannot offer a holistic protection and risk coverage in the offshore oil sector, whereby the risks are by definition not frequent, extremely tangled in nature and extremely difficult to quantify. In addition, as there is limited global insurance capacity for this type of risks, there is very little underwriters' capacity in numbers able to offer this cover.⁴⁶

The ELD is also difficult to apply, as it would require as a prerequisite a complete restoration of the offshore marine environment to its baseline condition following an oil spill. However, this is not without problems as the precise level of biodiversity is unknown in these waters, means that insurers cannot adequately assess and quantify potential damage accurately enough to be able to offer cover. In addition, as oil spills cause damage that can last for many years, this entails that the ELD would require the operator (i.e., the offshore oil company) to pay the full economic cost of recovery works.

The greatest impact of rising insurance costs under a mandatory scheme would be felt by the smaller offshore oil contractors, which would be unable to obtain insurance and thus forced to leave the market. Lack of insurer capital would translate into reduced underwriting capacity. Due to the fact that the offshore energy sector is global, perhaps an international (rather than an EU) solution to its risks would be more appropriate.

The EU established a regulatory framework for offshore oil and gas operations following the April 2010 DWH accident so as to raise the safety and environmental protection standards of all EU offshore operations.⁴⁷ A Regulation on the safety of offshore oil and gas prospecting, exploration and production activities,⁴⁸ introduced in October 2011, furthered the application scope of the Environmental Liability Directive (ELD) and asked for the assessment and evaluation of all offshore oil licence applicants to address incidents that might occur, bearing also in mind that insurance can be a transfer risk mechanism for environmental damage caused by EU industries, but it cannot act as a holistic sole solution, as there is no such insurance market capacity, even if there was a willingness to offer such underwriting coverage.

Also, in 2013 the OSD Directive, i.e. Directive 2013/30/EU⁴⁹ (Offshore Safety Directive - OSD) was introduced in an effort to offer a more comprehensive EU framework for preventing and addressing major incidents harming the environment. The provisions in the OSD are

⁴⁵ M. Nordquist, A. Fausser, 'Offshore Drilling in the Outer Continental Shelf: International Best Practices and Safety Standards in the wake of the DWH Explosion and Oil Spill', p. 127, in M. Lodge, M. Nordquist, 'Peaceful Order in the World's Oceans', Brill, 2014.

⁴⁶ <https://www.insuranceeurope.eu/key-messages-offshore-oil-liabilities> (accessed 13.11.2022)

⁴⁷ European Commission, 'Report on the Liability, Compensation and Financial Security for Offshore Oil And Gas Operations' (2015) SWD 167 Final, 14/9/2015.

⁴⁸ <https://www.insuranceeurope.eu/key-messages-offshore-oil-liabilities> (accessed 21 Oct. 2022)

⁴⁹ Directive 2013/30/EU of the European Parliament and the Council of 12 June 2013 on the safety of offshore oil and gas operations and amending Directive 2004/35/EC, OJ L 178 of 28.6.2013 p. 66.

complemented by the Offshore Protocol of the Barcelona Convention⁵⁰ whereby in article 27(2)(b) it is promulgated that that Parties shall ensure that operators have adequate insurance in place for potential damages coverage.

In addition, as per article 4(3) of the OSD, Member States need establish mechanisms for handling relevant compensation claims. However, it is discernible that the financial security instruments available do not cover all damage relating to the occurrence of offshore accidents possibly also due to a lack of regulatory requirement for appropriate levels of coverage.

Given that the majority of oil and gas production in the EU takes place offshore, and the departure of the UK from the EU, whereby the UK operated 363 offshore installations, there are now around 193 installations in EU waters. The DWH disaster highlighted the need for EU wide rules for environmental damage. The OSD sets rules to help prevent accidents and more specifically, a) the need for a "Report on Major Hazards", with a risk assessment and an emergency response plan for the offshore installation, b) the guarantee of the availability of resources to be used when needed; c) the availability of finances and relevant technical expertise; d) the verification of technical solutions; e) the verification of safety provisions, environmental protection measures, and the emergency preparedness of rigs and platforms; f) the availability of safety of installations for the information of EU citizens.⁵¹

The OSD channels the liability to the licensee, hence provides clarity re the risks to be safeguarded by licensees during their operations. In relation to environmental damage from offshore accidents, any OSD provisions include offshore operations under the ELD. The right to compensation for damage suffered can be based on legal or contractual provisions or it may be that compensation is automatically awarded where there are "opt-out" types of class actions or if contractually agreed as such.⁵²

The Commission issued a report in 2020 outlining the implementing of the OSD Directive. It showed that potential benefits in terms of avoided accidents largely exceed the cost of implementation and that the Directive harmonised rules and created a level playing field across the EU. However, greater protection of the environment and stronger financial responsibility mechanisms would be warranted, and new regulatory measures and subjective industry arrangements are needed to stabilise before any further legislative developments can be considered. Hence the Commission will readdress issues re liability, financial security and the handling of compensation claims as per the EU Green Deal, to help the EU achieve a successful and just transition towards a sustainable future.⁵³

⁵⁰ Council Decision of 17 December 2012, at p. 13. <https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2013:004:0013:0014:EN:PDF> (accessed 16.11.2022)

⁵¹ EUROPEAN COMMISSION, SAFETY OF OFFSHORE OIL AND GAS OPERATIONS DIRECTIVE EU rules to prevent and respond to accidents on offshore installations, https://energy.ec.europa.eu/topics/energy-security/offshore-oil-and-gas-safety/safety-offshore-oil-and-gas-operations-directive_en (accessed 20.11.2022)

⁵² European Commission, Report from the Commission to the European Parliament and the Council, on liability, compensation and financial security for offshore oil and gas operations pursuant to Article 39 of Directive 2013/30/EU, SWD(2015) 167, Final, <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52015DC0422&from=EN> (accessed 20.11.2022)

⁵³ European Commission, Report assessing the implementation of Directive 2013/30/EU of the European Parliament and of the Council of 12 June 2013 on the safety of offshore oil and gas operations and amending

3.3 USA

The Oil Pollution Act 1990 (OPA 90), 33 U.S.C. § 2702(a), imposes strict liability for ‘removal costs and damages’ on the ‘responsible party’. The U.S. Coast Guard designated B.P. as the ‘responsible party’ for the oil and gas flowing from the subsea well and Transocean as the ‘responsible party’ for any pollution caused by the Deepwater Horizon itself on or above the surface of the water.

The US government failed to regulate adequately offshore drilling in its outer continental shelf (OCS) region during the years prior to the DWH incident. The US system governing the offshore drilling industry prior to the DWH spill was predominantly one of command and control style systems requirement. Such requirements are at present rejected in the wake of major disasters in favour of regulations that take risk into account in decision making. The Minerals Management Service (MMS) of the U.S. Department of the Interior (DOI) was the federal agency primarily responsible for regulating the safety of offshore drilling at the time of the DWH accident. After the accident, the newly formed Bureau of Ocean Energy Management, Regulation, and Enforcement (BOEMRE) was assigned responsibility for regulating the safety of offshore drilling operations previously assigned to MMS. MMS had relied on a primarily prescriptive approach for regulation of offshore drilling. Under that approach, specific requirements for equipment and operations were developed, and then compliance with the regulations was monitored through auditing. Prescriptive regulations are often developed through a multiyear process in response to events or observed trends. As a result, the regulations invariably are neither timely nor complete and lag behind the development of new technologies. The DWH accident was precipitated by multiple flawed decisions involving the operator, drilling contractor, and service companies as they moved toward temporary abandonment of the well despite indications of increasing hazard. The net effect of these decisions made by the rig personnel was to reduce the available margins of safety that take into account complexities of the hydrocarbon reservoirs and well geology discovered through drilling and the subsequent changes in the execution of the well plan. While certain inadequacies were identified and documented in various reports over the years, it appears that there was a misplaced trust by both industry and responsible government authorities in the ability of the BOP to act as a fail-safe mechanism. The regulatory regime was ineffective in addressing the risks of the Macondo well. The actions of the regulators did not display an awareness of the risks or the very narrow margins of safety. The DWH accident demonstrated that the regulatory regime was ineffective in addressing the risks of the Macondo well. The actions of the regulators did not display an awareness of the risks or the very narrow margins of safety.

Of the most significant step taken was the establishment of a requirement for a Safety and Environmental Management System (SEM). Implementation of Safety and Environmental Management Systems (SEMs) begun in November 2011 as a proactive, goal-oriented risk management system similar in many ways to the systems used in the North Sea by the United Kingdom and Norway and on the outer continental shelves of Canada and Australia, requiring

Directive 2004/35/EC COM/2020/732 final, SWD(2020) 269 final, <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52020DC0732&from=EN> >(accessed 20.11.2022)

companies to develop, implement, and manage a safety and environmental management system in accordance with the American Petroleum Institute's (API's) Recommended Practice 75 for Development of a Safety and Environmental Management Program for Offshore Operations and Facilities. SEMs were prior voluntary but now are compulsory and required to adhere to objectives such as focusing attention on human error on incidents; improving safety and environmental records continuously; encouraging the use of performance-based operating practices; collaborating with the industry to promote the interests of offshore-worker safety and environmental protection.⁵⁴

Post DWH, in the USA a review was carried out of the OPA. More specifically, calls were made for the liability cap in the OPA to be raised. Prior to this such caps were not publicised. It is however questionable whether such caps can now be relied upon long term in the insurance industry. Further, OPA is not the only regulation the US authorities can pursue. The Clean Water Act would apply as would the Alternative Minimum Fines Act. An indication of the new context post DWH was given by the US Bureau of Safety and Environmental Enforcement which approved Shell's oil spill response plan for the Chukchi Sea in Alaska only on the following conditions: Shell had to prepare for a worst case discharge of nearly five times that of its previous plan; to include planning for adverse weather conditions and to develop special equipment and strategies which could respond to a loss of well control and a spill.⁵⁵

3.4 Mexico

The DWH oil spill triggered also effects in other jurisdictions. In Mexico, directly after the spill, federal and environmental authorities and Pemex, the major oil and gas operator, undertook a damage prevention exercise, which included a number of audits of compliance standards of the drilling rigs, and checking all drilling activities on the rigs and the blow out preventers on exploratory wells. The Mexican Hydrocarbons National Commission, in conjunction with Pemex, the Mexican Secretary of the Environment and Natural Resources (Semarnat), and the Federal Agency for the Protection of the Environment (Profepa), proposed new regulations to test rigs and to dismantle submarine control systems on the rigs. As a result, all rigs have to adhere to that standard and in addition, Pemex reviewed all of its contractors' compliance with regulations.

3.5 Norway

The Norwegian regulatory system has been cited often as a perfect example of successfully implemented partnership between industry and government. Norway has in effect adopted a performance-based approach with supplementary prescriptive requirements though its approach was predominantly prescriptive in earlier years. In the 1970s the Norwegian Petroleum Directorate was the single agency responsible for safety drilling licenses and revenue. However, two major incidents in 1977 and 1980 led Norway to restructure its regulatory system issuing guidelines and requiring quantitative risk analysis for all offshore installations, as well as enacting the Petroleum Activities Act in 1985 and launching the Norwegian Petroleum Safety Agency in 2004, the latter being an independent government supervisorial body with regulatory responsibilities. Overall this is an example of how government can strike balance between safety and efficiency.⁵⁶

⁵⁴ M. Nordquist et al, *supra* note 45, 133-139.

⁵⁵ P. Cameron, *supra* note 19, 213-215.

⁵⁶ M. Nordquist et al, *supra* note 45, 122-123.

4 Discussion

The insurance market post- the DWH appears to be nervous about perceived contractor liability risk and with regards to general exclusions for catastrophic risks from the well, such as blowout and pollution which are traditionally viewed as operator risks which have been indemnified to the contractor. There is no international legal framework in place to deal with the question of liability arising from pollution in the event of pollution following a blowout.

The Offshore Pollution Liability Agreement (OPOL) was set up in 1975 as a short-term measure and an alternative to a 1976 international convention that never came into effect. OPOL acts as a back-up to the individual company's own insurance provision if that proves insufficient to address compensation claims arising from offshore pollution incidents from E&P facilities. Within the national frameworks, the use of OPOL varies in Europe. In the United Kingdom, for example, the relevant government department for offshore regulatory matters, DECC, requires all operators to have signed up to OPOL and to demonstrate evidence of financial responsibility by providing evidence of insurance. However, on the UKCS an operator is liable for oil spills under tort and statute as well as the OPOL scheme. Also, proposals by some insurance brokers and major insurers in 2010 to create a \$10 billion insurance product for catastrophic oilfield (BP-type) risks have not materialised, due to the lack of any regulatory requirement (such as, e.g., a requirement in the United States to increase OPA limits to \$10 billion). Major reasons for this have been a concern that such a very high limit would only become a target for governments and lawyers, and the lack of any viable pricing mechanism.

In the U.S., OPA rules on compensation and liability cover the loss of natural resources, removal and clean-up costs, property damage, loss of profits/earning capacity, loss of government revenue or increased public services costs. OPA includes liability caps that vary according to the type of spill and type of damage caused. A liability cap is applied to offshore licensees at US \$75 million a spill, plus removal costs. In the BP's case, BP waived the US \$75 million OPA cap. There is no cap if gross negligence or wilful misconduct or a violation of some regulations. In addition, each state has its own environmental legislation with provision for damages. Tort claims may be made under state and federal law. The Clean Water Act permits a government to seek fines on a per barrel basis which can increase if a judge finds that the company has been grossly negligent in allowing the pollution to occur. In BP's case, this may lead to billions of dollars of liability. It follows, that a major problem is the lack of any consistent national legislation in this field or an international convention that would guide or even require operators to adhere to the established industry practice. Such a lacuna has also an effect on insurance in this field.

After the DWH incident, the likelihood that insurance premiums for contractors would increase or that similar actions would be taken by the insurance industry has grown. The insurance industry itself has been criticised as failing to keep up with changes in the legal and regulatory environment post the BP oil spill. The Director of Performance Management at Lloyd's has noted that the environment has become more onerous.⁵⁷ A review of the offshore

⁵⁷ Staff Reporter, 'Lloyd's: Offshore energy underwriting 'out of step'' (21 September 2011) (accessed 14 June 2018) at <http://www.cirmagazine.com/cir/lloyds-offshore-energy-underwriting-out-of-step.php>; 'Bolt criticises energy underwriters' (22 September 2011) *Insurance Insight*.

energy class in the Lloyd's market revealed concerns about the way in which risks are now assessed and priced and the way in which exposures are managed. There is a 'material imbalance between premiums charged and exposures assumed.' A major problem with the insurance of such risks is the discrepancy between the large amounts of capital needed to underwrite and the modest returns generated. Similarly, the size of claims from individual events such as the BP oil spill dwarf the premiums received. Moreover, there is a structural issue in the sense that package policies lack the transparency necessary to reveal energy sector risks and aggregations of risk are difficult to assess and manage.⁵⁸ It is not unreasonable to foresee that the market for insuring pollution risks will 'dry out' completely. A potential solution for confronting the risk to have an insurance market completely unwilling to insure pollution risks, would be to seek government support for an industry initiative which would entail the insurance industry as well as operators and contractors to act together in their common interest. Such a solution would have the overall aim to let governments take the measure of the problem and step in to provide legal stability so that a viable allocation of liability can emerge and insurance markets can adapt. Any apportionment of liability would, however, have to take into account who is best able to pay for the risk.⁵⁹

The attention paid by the global community to the potential for damage resulting from offshore installations is, of course, partially the result of the 'hype' after the DWH incident in 2010. Notwithstanding the above suggestions, the question, which arises is to what extent the risk of an accident such as the DWH oil spill also exists for future operations in off-shore oil and gas assess and how this could be better addressed if such an occurrence happened. However, long before that, prevention mechanisms should be in place and are of major importance. It is suggested that the use of mandatory insurance in place of the financial responsibility requirement under the US Oil Pollution Act of 1990 (OPA) provided that the coverage of the existing insurance market of around US\$1 billion for offshore liability would have to be raised so as to provide a substantially higher amount of coverage. However, such an option would constitute a major challenge to the insurance market. Munich Re has presented, shortly after the DWH accident, a proposal to create a facility that would be able to generate substantial capacity for offshore- related risks.⁶⁰

It is unlikely that the commercial insurance market would be able and willing to provide amounts of coverage for offshore-related risks higher than the amounts already available today. In fact, post-DWH the available amounts of coverage have even reduced instead of having increased. The only indication of increased amounts of insurance coverage was the facility proposed by Munich Re, a proposal which has so far largely remained on paper, and many stake- holders doubt that it will ever be brought into practice. For Europe, a similar facility could be developed as well, but stakeholders will (with- out a regulatory duty to participate in it) undoubtedly have the same reservations. One should note here that full insurance coverage probably will never be available as insurance can never provide full coverage for all liability, as, first of all, there are risks which are simply uninsurable (e.g. damage which is intention-ally caused); secondly, insurance coverage will be more limited than liability due to the fact that it is limited to sudden and accidental incidents and based on particular exclusions which exist so as to avoid entrepreneurial risks and to reduce the risk of accumulation., which in its turn entails

⁵⁸ In a letter to all CEOs and active underwriters dated 29 July 2011 Mr Bolt stated that it is 'a requirement for 2012 plan approval that all Energy Liabilities written at Lloyd's are underwritten in stand-alone policies; compliance with this requirement is a precondition of Lloyd's approval of Syndicate Business Plans for Energy Liability.'

⁵⁹ P. Cameron, *supra* note 19, 210-219.

⁶⁰ M. Faure et al, *supra* note 26, 236-265.

that any insurance coverage provided by the insurance market will necessarily not be the same as full coverage for all potential liability.

Potential environmental exposures for energy companies entail large-scale catastrophic events as the DWH accident demonstrated with a considerable scale of potential losses for the assured. Following the DWH accident, the London market has been adapted to have casualty offerings for the energy market include follow-form excess liability limits available up to \$50mn, with catastrophic, high excess limits available of up to \$150mn. Such coverage typically created through an endorsement to the general casualty policy for pollution events that fit within specific time parameters. However, the market has also adapted in offering extensive environmental liability offering in the guise of EIL insurance with such policies being also able to respond to regulatory obligations.⁶¹ Because there are no easy solutions to increase the coverage available for offshore-related risks in case of a new occurrence, it is essential that policy makers refrain from mandating pooling between operators of off-shore installations but instead solicit for the creation of industry-wide pooling by providing high standards of safety regulation so as to enhance safety regulation which in its turn could facilitate and assist mutual monitoring by operators and encourage pooling arrangements.⁶² Another solution in tackling any existing concerns about the adequacy of the current liability allocation regime in environmental oil pollution, entails seeking government support for an industry initiative, which would include the insurance and operators and contractors. It would be driven by governments that have already shown a propensity to act together in their common interest. It would give muscle to an industry-wide participation which is a sine qua non for the generation of practical solutions. It would have a strong chance of implementation within a time frame that is fairly short and could become a model for other regions around the world. The overall aim of the latter solution would be to let governments take the measure of the problem and step in to provide legal stability so that a viable allocation of liability can emerge and as a result of that insurance markets could easily adapt. Any apportionment of liability would however have to consider who would be best able to pay for the risk.⁶³

5 Conclusions

With such a disparity and variety of environmental regulation around the world, the increasing cost of remediation for high-profile environmental accidents will steadily grow. Increased public awareness surrounding environmental issues means companies are more likely to be taken to task for environmental damage or pollution today than in the past.

The DWH disaster cost BP over \$65bn, but it is the reputational fallout that has had a lasting impact. In January 2018, as BP was nearing the end of the \$65bn DWH compensation process, it issued a statement proclaiming an unexpectedly high pay-out of \$1.7bn among the final few hundred outstanding claims. BP announced it would pay the \$1.7bn charge in the last quarter of 2017 for court-ordered payments resulting from the worst oil spill in US history.⁶⁴ The latest charge will cover payments to business owners in the area. The company's spill-related pay-

⁶¹ S. Sutherland, 'Paying for Pollution?' (2015) *AIG - Insider Quarterly's Winter 2015 Issue*.

⁶² *Ibid*.

⁶³ P. Cameron, 'Liability for Catastrophic Risk in the Oil and Gas Industry', *I.E.L.R.* 2012, 6, 207-219, 218-219.

⁶⁴ A. Vaughan, 'Deepwater Horizon oil spill – BP's Deepwater Horizon bill tops \$65BN', *The Guardian*, 18th January 2018, <https://www.theguardian.com/business/2018/jan/16/bps-deepwater-horizon-bill-tops-65bn> (accessed 20 Oct. 2022)

outs will rise to \$3 billion in 2018 from an earlier estimate of \$2 billion, while those for 2017 will remain at \$5.5 billion.⁶⁵ The jump in spill-related costs is a reminder of how difficult it has been for the company to draw a line under deep water, eight years on from the Gulf of Mexico disaster, which affected everyone from fishermen to people working in tourism.⁶⁶ It is also a stark reminder on how difficult it is to anticipate the actual losses occurred during oil pollution liability incidents from off-shore oil and gas operations as well as the intricacies of placing caps in such liabilities. Post-DWH, insurers have tended to add crisis management services to their environmental insurance solutions. Regulators have also appeared as stepping up their enforcement of environmental laws. In Europe, the ELD has been adopted by member states. Coupled by the OSD they are representing sound legislative mechanisms for better tackling environmental disasters.

Demand for EIL insurance has grown steadily in recent years but it remains a low likelihood, high significance cover. However, environmental incidents are unlikely to occur thanks to proper risk management and health & safety procedures, but when they do, they are expensive to put right. Hence the role of insurance and of adequate coverage is utterly important.

Possible recommendations for future steps could include the introduction and collection of data on damages resulting from off-shore oil and gas incidents via the establishment of an institution at EU level to centrally collect those data and hence help increase the insurability of offshore-related damage. Notwithstanding such an initiative which would also need to be backed up by support from the EU Member States in the form of an invitation to the offshore oil and gas producers within their jurisdictions to collaborate in the provision of those data to such a central European institution, the EU needs take the initiative alongside a specialised UN agency or other institutions to come to an international agreement especially focusing on offshore-related incidents with a transboundary character. Similarly, an EU-wide regime for damage caused by offshore-related risks needs be established and provide for a regime of strict liability for damage caused by offshore-related risks, however taking into account the behaviour of the victim as well, establishing also a system of joint and several liability of various parties who contributed to the offshore-related risk should be installed and avoiding financial caps on liability so as to help expose operators and others who contributed to offshore-related risks fully to the social costs created by their activity. Last but not least, a mechanism to facilitate early compensation payments to groups of victims particularly vulnerable to an offshore-related incident, should be established.⁶⁷

The enactment of the OPA has created a more defensible liability regime, using the DWH incident as a test case. The OPA imposes strict but limited liability on parties responsible for vessels and facilities from which oil is discharged into U.S. waters. Responsible parties are liable for removal costs and various damages, including harm to natural resources and relational economic losses, up to the statutory caps. In the case of gross negligence, recklessness, or wilful misconduct, liability caps are lifted, but punitive damages are apparently precluded. However, in cases of egregious conduct, the OPA allows expansion of liability beyond the general caps, for reasons that overlap the traditional justifications for punitive damages. The caps are somewhat arbitrary because they are insensitive to factors that seem relevant in determining the proper scope of liability, such as the fact that many relational losses

⁶⁵ K. Giblom, A. Jordan, 'BP Still Paying Gulf Oil Spill Claims as Court Battles Wind Down', Insurance Journal, Jan. 16, 2018, <https://www.insurancejournal.com/news/national/2018/01/16/477216.html> (accessed 20 Oct. 2022)

⁶⁶ A. Vaughan, *supra* note 64.

⁶⁷ M. Faure, et al, *supra* note 24, 383-387.

are not true social costs. In cases of gross negligence, the OPA lifts the caps altogether, although the normatively desirable scope of liability might be lower than the aggregate loss, including relational losses. Allowing states to impose unlimited liability makes the most significant contribution of the OPA, namely liability caps, practically meaningless. Hence, following the DWH there have been calls for raising the OPA caps, or for an even more comprehensive legislative reform.⁶⁸ Another solution might be the promulgation of the idea of the creation of an international organisation to monitor safety standards and hence help streamline the operation of the natural resources industry and the smooth functioning of the insurance industry as well. And allow the quantification of risks to enhance insurability. Countries need also ensure that the offshore drilling industry undertakes a substantial investigation of the risks involved in offshore drilling to help in this way establish a more stable insurance market and promote better and more pragmatic availability of insurance coverage.⁶⁹

At EU level, the OSD Directive and the 2020 Commission Report following it highlighted the benefits of its implementation and the existence of harmonised rules as well as the need for further measures to be implemented to offer greater environmental protection and further responsibility and liability mechanisms in place.⁷⁰

Following the DWH actions were taken to prevent similar accidents and implement environmental regulations so as to get deeper regulatory protection.⁷¹ Prior to this time point it had already been established as a legal argument that polluters should pay compensation for environmental damage. Erika established accountability in environmental crimes and set stringent rules to reprimand those causing environmental damage. This all had been initially prompted by the Erika incident and the ruling of the court in it which was the one to set front the legal argument that polluters should pay compensation for environmental damage. Hence, in conclusion, it might be argued that whilst Erika helped establish accountability in environmental incidents, it was the DWH incident that prompted legislators to enact laws for deeper regulatory protection.⁷² It is nevertheless important to solidify the regulatory regime and protection offered, outside the unfortunate incentive of oil pollution spills occurring, hence international and national or regional legislation enactment and awareness are needed.

⁶⁸ R. Perry, 'The Deepwater Horizon Oil Spill and the Limits of Civil Liability', Washington Law Review, 2011 86:1, 1-68, 66-68.

⁶⁹ M. Nordquist et al, *supra* note 45, 139-145.

⁷⁰ European Commission, Report assessing the implementation of Directive 2013/30/EU of the European Parliament and of the Council of 12 June 2013 on the safety of offshore oil and gas operations and amending Directive 2004/35/EC COM/2020/732 final, SWD(2020) 269 final, <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52020DC0732&from=EN> >(accessed 20.11.2022)

⁷¹ E.g., the 2012 updated Drilling Safety Rule, which made adjustments, to improve the safety of offshore drilling operations.

⁷² *Ibid.*