

# 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

Shane Bosma\*

## 1 Introduction

The recent large scale pollution events arising from the explosion and sinking of the *Deepwater Horizon* oil rig on the Macondo well blowout in the Gulf of Mexico on 20 April 2010 and the separate explosion on the Montara wellhead platform in the Timor Sea on 21 August 2009 have thrown into sharp relief the legal framework regulating offshore oil and gas facilities and governing oil spill liability from such facilities.<sup>1</sup>

The enormity of the stakes involved with any oil pollution caused by offshore oil and gas facilities is self-evident from the sheer magnitude of each of the Macondo and Montara incidents and the size and complexity of the legal claims that have arisen from each of these incidents.

Following the explosion and sinking of the *Deepwater Horizon* oil rig at the Macondo field in the Gulf of Mexico on 20 April 2010, eleven people tragically lost their lives and a total estimated 4.9 million barrels of oil spilled into the environment until the well was effectively killed five months later on 19 September 2010, making it the world's worst release of oil ever.<sup>2</sup> Literally hundreds of lawsuits have been commenced against the operator of the field, BP, and integrated into the one case<sup>3</sup> before the US District Court in New Orleans.<sup>4</sup> BP has also commenced legal proceedings against each of Halliburton, the well services contractor, Transocean, the *Deepwater Horizon's* owner and operator, and Cameron International, the manufacturer of the blowout preventer, seeking recovery of USD40.9 billion set aside last year by BP for the spill-related costs it has incurred.<sup>5</sup> BP's joint venture partners in the Macondo field, Anadarko and Mitsui, also commenced legal action against BP for alleged breaches of the joint operating agreement governing their relationship, adding yet a further layer of complexity to the already complicated framework of legal proceedings arising from the incident.<sup>6</sup>

In a similar incident following the explosion on the Montara wellhead platform on 21 August 2009, oil spilled into the Timor Sea and continued leaking until 3 November 2009 (in total 74 days), making it one of Australia's worst ever oil spills and giving rise to a AUD2.4 billion compensation claim by the Indonesian government against the Thai-owned oil company, PTTEP.<sup>7</sup> PTTEP has not accepted the claim on the basis that 'no verifiable scientific evidence' had been presented to the company to support the Indonesian government's claim for

---

\* LLB (Hons), BA, Postgrad Dip (Finance), Postgrad Dip (Maritime Law), MBA, MIB, LLM (Maritime Law). This paper was initially submitted as a dissertation in partial satisfaction of the requirements for the London Metropolitan University/Lloyds Academy Master of Laws (Maritime Law) programme. The author acknowledges the excellent referencing assistance of Ms Bianca Kabel, the invaluable support and guidance of Ms Susan Hawker, Course Director, and the time and effort of Ms Harma Bosma and Mrs Vanessa Kronic in reviewing and commenting upon the earlier and final drafts of this paper. The text represents the law as at August 2011.

<sup>1</sup> Nathan Richardson, 'Deepwater Horizon and the Patchwork of Oil Spill Liability Law' (2010) *Resources for the Future* <<http://www.rff.org/rff/documents/RFF-BCK-Richardson-OilLiability.pdf>> at 10 December 2010; N Butterly, 'Oil industry shake-up in Montara report', *The Western Australian* (online), 23 November 2010.

<<http://au.news.yahoo.com/thewest/business/a/-/wa/8371846/oil-industry-shake-up-in-montara-report/>> at 10 December 2010.

<sup>2</sup> Harry Weber, 'Blown-out BP well finally killed at bottom of Gulf', *Associated Press (Yahoo News Company)* (online), 19 October 2010 <[http://news.yahoo.com/s/ap/20100919/ap\\_on\\_bi\\_ge/us\\_gulf\\_oil\\_spill](http://news.yahoo.com/s/ap/20100919/ap_on_bi_ge/us_gulf_oil_spill)> at 12 December 2010; Campbell Robertson, 'Gulf Spill Is the Largest of Its Kind, Scientists Say', *The New York Times* (online) <[http://www.nytimes.com/2010/08/03/us/03spill.html?\\_r=1&fta=y](http://www.nytimes.com/2010/08/03/us/03spill.html?_r=1&fta=y)> at 12 December 2010.

<sup>3</sup> *Re: Oil Spill by the Oil Rig Deepwater Horizon in the Gulf of Mexico on April 20, 2010 MDL-2179*, (US District Court, Eastern District of Louisiana (New Orleans), 2010).

<sup>4</sup> Noah Brenner, 'Pair sue BP over tragedy' *Upstream* (Singapore) 22 April 2011, 10.

<sup>5</sup> Guy Chazan, 'BP sues Gulf of Mexico Partners for USD40bn' *The Australian* (online), 2011 <<http://www.theaustralian.com.au/business/news/bp-sues-gulf-of-mexico-partners-for-us40bn/>> at 25 April 2011.

<sup>6</sup> Brenner, above n 4, 10.

<sup>7</sup> 'WA oil spill 'one of Australia's worst', *ABC News* (online), 24 August 2009.

<<http://www.webcitation.org/513RrgF24>>; Paige Taylor, 'Jakarta 'wrong' on spill damage' *The Australian* (online), 11 November 2010, <<http://www.theaustralian.com.au/news/nation/jakarta-wrong-on-spill-damage/story-e6frg6nf-1225951388832>>.

compensation, highlighting the inherent evidentiary difficulties associated with such claims.<sup>8</sup> The East Timorese government has also separately said that it will be seeking compensation from each of the Australian government and PTTEP for damage caused by the spill to East Timor's environment.<sup>9</sup>

The objectives of the research undertaken in this article are essentially as follows:

1. To provide a brief synopsis of the extant legal obligations of States under existing international law in relation to the regulation of marine oil pollution from offshore oil facilities;
2. To critically analyse the sufficiency and adequacy of the current liability regime as a means of ensuring environmental accountability and recoverability of claims in connection with marine oil pollution arising from offshore facilities;
3. To use the outcome of this analysis as a basis to examine and determine whether coastal States are potentially liable for any failure to fulfill a responsibility to properly regulate against the risk of marine pollution from offshore installations and to provide an adequate means of compensation for any claims arising from such pollution; and
4. To consider whether there may be a more suitable alternative regime to provide a satisfactory and adequate vehicle for transnational environmental accountability for marine pollution damage arising from offshore facilities.

The current status of any international civil liability regime applying to marine pollution from offshore facilities will be considered and, in order to illustrate the position as it applies in the world's main offshore oil-producing regions, the regional liability regimes that currently apply in the European North Sea, the Gulf of Mexico, Australasia and West Africa will be examined. An overview will also be performed of the licensing regulations that apply in sample countries from each of the European North Sea, the Gulf of Mexico, Australasia and West Africa regions in order to assess the extent to which the risk of marine pollution damage from offshore facilities and the financial capacity of operators to meet any pollution liability is being proactively regulated and monitored by the regulatory authorities in those countries.

Relevant to the consideration of the responsibility of operators of offshore facilities involving multiple joint venture parties and of contractors providing offshore oilfield services, an analysis will be undertaken of the pollution liability requirements under the standard forms of joint operating agreements and drilling and well services contracts that typically apply in these regions and govern the obligations owed by operators and their contractors with respect to the joint venture operations.

Ultimately, any civil liability will sound in claims being presented to the insurance industry for payment. Accordingly, in order to form a view as to the extent to which any such claims may be recovered from insurance, the policy terms of the most immediately relevant liability policies will be examined, namely the international group of P&I Clubs and the industry standard wording for operator's extra expense and pollution liability insurance. Available insurance industry data and statistics maintained by the international group of P&I Clubs and the major global brokerage houses will also be analysed to assess the amounts of liability insurance cover that, subject to policy terms, may be generally available to respond to any marine pollution arising from offshore facilities.

The responsibility of States for the sufficiency and adequacy of the current marine oil pollution liability regime within these regional legislative frameworks will then be examined as a function of:

1. The value of claims typically arising from pollution caused by offshore units, focusing in particular on the anticipated claims arising from the recent *Deep Horizon* and Montara incidents;
2. The difficulties associated with pursuing claims and successfully establishing liability in connection with pollution arising from offshore units; and

---

<sup>8</sup> PTTEP Australasia, 'PTTEPAA does not accept compensation claim' (Media Release, 2 September 2010)

<<http://www.au.pttep.com/uploads/PTTEPAA%20Media%20release%/202%20September%202010.pdf>> at 17 May 2011.

<sup>9</sup> ABC News, 'East Timor wants compo for oil spill fallout', *ABC News* (online), 5 November 2009

<<http://www.abc.net.au/news/stories/2009/11/05/2734579.htm>>.

3. The likely availability and adequacy of insurance coverage for claims arising from pollution caused by offshore units.

An alternative regime for the regulation of marine pollution from offshore installations will be explored toward the end of both minimising the risk of incidents and, if incidents do occur, to optimize the recoverability of claims in terms of establishing liability for claims and ensuring sufficient financial capacity is available to meet claims.

Based on the results of the research, the following conclusions are made in this article:

1. the current marine oil pollution liability regime is insufficient and inadequate;
2. coastal States are potentially responsible for the resultant lack of accountability and any non-recoverability of claims arising under the current legislative regime; and
3. a species of a strict civil liability regime backed by a compulsory liability insurance scheme coupled with an industry-funded liability trust fund would provide a more satisfactory and effective vehicle for transnational environmental accountability for marine pollution damage arising from offshore facilities; and
4. the imposition of corporate criminal liability for oil pollution from offshore facilities upon enterprises with faulty risk management or defective corporate culture would properly recognize such incidents as the grave social disturbances that they are, promote accountability and encourage a corporate culture of responsible risk management.

## 2 State Responsibility for Marine Pollution from Offshore Facilities

International law generally recognizes that for international State responsibility to exist, the damage must be a result of a violation, by the State itself, of some international rule.<sup>10</sup> The International Law Commission's Draft Articles on State Responsibility provide that every internationally wrongful act of a State entails the international responsibility of that State<sup>11</sup> and there is an internationally wrongful act of a State when conduct consisting of an act or omission:

1. is attributable to the State under international law; and
2. constitutes a breach of an international obligation of the State.<sup>12</sup>

International obligations of a State can originate from conventions to which the State is a party, or arise under customary international law.<sup>13</sup>

### 2.1 International Conventions Governing Pollution from Offshore Installations

Kashubsky notes that there are only a limited number of legal provisions that can be found in international conventions dealing with pollution from offshore installations.<sup>14</sup> The two principle international conventions dealing with the responsibility of coastal States in relation to marine pollution from offshore installations are the *United Nations Convention on the Law of the Sea 1982* and the *International Convention on Oil Pollution Preparedness, Response and Cooperation 1990*.

---

<sup>10</sup> Brian D Smith, *State Responsibility and the Marine Environment* (Clarendon Press, 1988) 22.

<sup>11</sup> International Law Commission, *Draft Articles on Responsibility of States for Internationally Wrongful Acts*, November 2001, Supplement No. 10 (A/56/10), chp.IV.E.1, art 1 in Crawford J, *The International Law Commission's Articles on State Responsibility: Introduction, Text and Commentaries* (Cambridge University Press, Cambridge, 2005) 77. The Draft Articles were adopted by the International Law Commission (ILC) on 9 August 2001 and are the result of a study extending over 40 years initiated by the UN itself and thus, can be considered 'teachings of the most respected publicists' for the purpose of art 38 (D)(d) of the Statute of the International Court of Justice. The Draft Articles are also considered to reflect customary international law.

<sup>12</sup> International Law Commission, *Draft Articles on Responsibility of States for Internationally Wrongful Acts*, November 2001, Supplement No. 10 (A/56/10), chp.IV.E.1, art 2, in Crawford, above n 11, 81.

<sup>13</sup> Ian Brownlie, *Principles of International Law* (Oxford University Press, 7<sup>th</sup> ed, 2008) 436-37.

<sup>14</sup> Mikhail Kashubsky, 'Marine Pollution from the Offshore Oil and Gas Industry: Review of Major Conventions and Russian Law (Part I)' (2007) 152 *Maritime Studies* 1, 3.

### 2.1.1 *The United Nations Convention on the Law of the Sea 1982 (UNCLOS)*<sup>15</sup>

*UNCLOS* authorises coastal States to construct offshore installations on the continental shelf and in the exclusive economic zone (EEZ) of the applicable State, and to exercise jurisdiction over these installations.<sup>16</sup>

Pursuant to *UNCLOS*, States are required to take steps to minimize marine pollution from offshore installations,<sup>17</sup> make efforts to implement national laws and standards regulating seabed activities,<sup>18</sup> cooperate globally and regionally in formulating international rules and standards for the protection of the marine environment,<sup>19</sup> enforce effective international standards,<sup>20</sup> and establish adequate compensation for damage caused by pollution to the marine environment.<sup>21</sup>

Importantly, *UNCLOS* does not set any definite or specific standards to be observed in relation to the prevention of marine pollution, but instead encourages States to develop national laws.<sup>22</sup>

### 2.1.2 *International Convention on Oil Pollution Preparedness, Response and Cooperation, 1990 (OPRC 1990)*<sup>23</sup>

*OPRC 1990* prescribes that each State party must establish a national system to promptly and effectively respond to oil pollution incidents, including establishing a competent national authority and a national contingency plan designed to respond to oil disasters and sets out the requirements for pollution emergency plans that vessels, offshore drilling units, production platforms, and onshore facilities must have.<sup>24</sup> The application of *OPRC 1990* extends to floating and fixed structures engaged in exploration, production, loading and unloading of oil.<sup>25</sup>

The convention sets out specific and detailed provisions dealing with the prevention of marine pollution from offshore installations and, in the absence of a specific convention dealing with offshore installations, *OPRC 1990* is regarded as probably the most important international legal instrument that regulates pollution of the marine environment from offshore oil and gas activities.<sup>26</sup>

## 2.2 Pollution and Customary International Law

The *Trail Smelter Case* established that ‘no State has a right to use or permit the use of its territory in such a manner as to cause injury by fumes in or to the territory of another or the properties or persons therein’.<sup>27</sup> Principle 21 of the 1972 *UN Stockholm Declaration on the Human Environment* emphasizes this duty, committing States ‘to ensure that activities within their jurisdiction or control do not cause damage to areas beyond the limits of national jurisdiction’.<sup>28</sup> Instances of State practice provide further evidence of the existence of such an obligation.<sup>29</sup>

---

<sup>15</sup> *United Nations Convention on the Law of the Sea (UNCLOS)*, 1982, 1833 UNTS 3 (entered into force 16 November 1994).

<sup>16</sup> *Ibid* arts 60, 80.

<sup>17</sup> *Ibid* art 194.

<sup>18</sup> *Ibid* art 208.

<sup>19</sup> *Ibid* art 197.

<sup>20</sup> *Ibid* arts 214, 215.

<sup>21</sup> *Ibid* art 235(2). Further, in relation to vessels registered with a State, the *Convention of the Law of the Sea* art 94(1) provides that a flag-State must ‘effectively exercise its jurisdiction and control in administrative, technical and social matters over ships flying its flag’. This is a direct reproduction of art 5(1) of the *Geneva Convention on the High Seas*, 1958, 450 UNTS 82, the preamble to which provides ‘The States Parties to this Convention desire to codify the rules of international law...’. The duty is therefore an aspect of customary international law.

<sup>22</sup> Kashubsky, n above 14, 3.

<sup>23</sup> *International Convention on Oil Pollution Preparedness, Response and Cooperation (Convention on Oil Pollution)*, 1990, 30 ILM 1991 (entered into force 13 May 1995).

<sup>24</sup> *Ibid* art 3.

<sup>25</sup> *Ibid* art 2(4).

<sup>26</sup> Kashubsky, above n 14, 4 citing Esmaeili, *The Legal Regime of Offshore Oil Rigs in International Law* (Ashgate Dartmouth, 2001) 157-8.

<sup>27</sup> *Trail Smelter Case* (1962) 3 RIAA 1905, 1965.

<sup>28</sup> *UN Stockholm Declaration on the Human Environment*, 1972, 993 UNTS 3.

<sup>29</sup> cf Smith, above n 10, 74-5.

Accordingly, the principle of *sic utere tuo ut alienum non laedas*<sup>30</sup> obliges States to ensure that activities within the marine environment do not cause extra-territorial harm to the rights/interests of a third State as a matter of customary international law.

## 2.3 The Issue of Due Diligence

The basis for responsibility in international law can be approached in two ways. The ‘objective’ or ‘risk’ theory accords responsibility where a causal connection and attributability can be established to the State rather than for any proven fault; the ‘subjective’ or ‘fault’ theory accords responsibility only when either *dolus* (intent) or *culpa* (negligence) can be proven on the part of the State.<sup>31</sup>

State practice<sup>32</sup> and the decisions of arbitral tribunals and of the International Court of Justice<sup>33</sup> point to widespread acceptance of the theory of objective responsibility as more actively promoting protection of the international marine environment through ensuring responsibility is not avoided upon claims of lack of fault, thereby increasing a State’s required vigilance in protection of the marine environment, and has been promoted by the ILC, a considerable number of commentators and other noted publicists.<sup>34</sup>

Under the objective standard, responsibility attaches to a State where an international obligation has been breached unless due diligence be proved.<sup>35</sup> According to Brownlie, what matters is the amount of control *which ought to have been exercised* in the particular circumstances, not the amount of actual control.<sup>36</sup> However, the decisions of tribunals and other sources offer no definition of ‘due diligence’, since what is involved is a standard which will vary according to the circumstances.

Accordingly, except in the area of strict liability, the responsibility of the State with respect to marine pollution from offshore facilities must be assessed by determining whether it has acted with due diligence in the circumstances.

## 2.4 Strict Liability for Abnormally Dangerous Activities

In addition to the strict civil liability regime applicable to marine oil pollution from vessels mentioned in section 3 below,<sup>37</sup> treaties concerning civil aviation,<sup>38</sup> space activity,<sup>39</sup> and nuclear activity<sup>40</sup> also stipulate strict liability for damage, illustrating an emergence at international law of the principle of strict State liability for harm caused by abnormally dangerous activities.<sup>41</sup> Moreover, the ILC has recently initiated work on international liability for

---

<sup>30</sup> ‘Use your own property in such a manner as not to injure that of another’.

<sup>31</sup> Brownlie, above n 13, 436-40.

<sup>32</sup> Ibid 437-438.

<sup>33</sup> In the *Neer Claim* (1926) 4 RIAA 60, the Commission held that: ‘the propriety of governmental acts should be put to the test of international standards’ (at 61). This was reinforced in the *Roberts Claim* (1926) 4 RIAA 77, where the test applied was ‘whether aliens are treated in accordance with ordinary standards of civilization’ (at 80) and in the *Caire Claim* (1929) 5 RIAA 516, where Presiding Commissioner Verzijl applied ‘the doctrine of ‘objective’ responsibility of the State, that is, the responsibility for the acts of the officials or organs of a State, which may devolve upon it even in the absence of any ‘fault’ of its own’ (at 529).

<sup>34</sup> No mention is made of the need for fault in the ILC Draft Articles on State Responsibility (see Crawford, above n 11, 84), nor in the *Declaration of United Nations Conference on Human Environment (Stockholm Declaration)*, *Declaration of the United Nations Conference on the Human Environment*, 21<sup>st</sup> plen mtg, UN Doc. A/CONF.48/14/Rev.1 (16 June 1972) reprinted in 11 I.L.M. 1416; J Starke, *Introduction to International Law* (Butterworths, 9<sup>th</sup> ed, 1984) 301; Brownlie, above n 13, 437-438. In any case, as Judge Azevedo noted in the *Corfu Channel case* (1949) ICJR 4, ‘the notion of culpa is always changing ... it tends to draw nearer the system of objective responsibility’. This statement was made in 1949; the trend since then has been a consistent evolution towards objective responsibility.

<sup>35</sup> Brownlie, above n 13, 455.

<sup>36</sup> Ibid 453.

<sup>37</sup> Refer to 3.0 Regional Regulatory Liability Regimes.

<sup>38</sup> *International Convention for the Unification of Certain Rules Relating to Damage Caused by Aircraft to Third Parties on the Surface*, 1933, 310 UNTS 181; *Convention on Damage Caused by Foreign Aircraft to Third Parties on the Surface*, 1952, 310 UNTS 181/1952, art 1 (entered into force 4 February 1958).

<sup>39</sup> *Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies*, 1967, 3 UST 2410, art VII (entered into force 10 October 1967); *Convention on Liability for Damage Caused by Objects Launched into Outer Space*, 1972, 672 UNTS 119, art II (entered into force 1 September 1972).

<sup>40</sup> *Vienna Convention on Civil Liability for Nuclear Damage*, 1963, 1063 UNTS 265, art IV (entered into force 12 November 1977); *Convention on the Liability of Operators of Nuclear Ships*, 1962, 57 AJIL 268, art II(1) (not yet in force).

<sup>41</sup> Evidence of such a principle can also be found in the practice of many States through the adoption of appropriate domestic legislation, see for e.g. American Law Institute *Restatement (Second) of Torts* s 519; see *Russian Civil Code* (Russian Federation) s 454. This expresses strict liability for activities attendant with ‘increased danger’. See *Code civil* [Civil Code] (France) art 1384. This provides for strict liability. The principle has also been advocated by a number of eminent writers – see, for example, John Kelson, ‘State Responsibility and the Abnormally Dangerous Activity’, (1972) *British Year Book of International Law* 197; G Handl, ‘International Liability of States for Marine

so-called lawful activities, which indicates the growing and widespread acceptance in general international law of strict State liability.<sup>42</sup>

The rationale for such a rule of 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. That is, the duty to redress any harm typical of the risk created flows from that balance of international rights and obligations embodied in the fundamental notion of the sovereign equality of States, the potential disturbance of which the acting State was willing to countenance.<sup>43</sup>

An activity may be considered abnormally dangerous where either the probability or magnitude of harm is substantial.<sup>44</sup> As evidenced by the magnitude of the environmental harm arising from each of the Macondo and the Montara incidents, there seems little doubt that the operations of offshore oil and gas facilities would qualify as abnormally dangerous activities.

It is clear from the foregoing analysis that States have both an obligation under international law and a vested interest to ensure that the risk of marine pollution from offshore oil facilities is properly regulated and that measures are in place to ensure that there is adequate compensation for damage caused by pollution to the marine environment. It is in this context that the existing regulatory regimes covering marine pollution from offshore oil facilities will now be examined.

### 3 Regional Regulatory and Liability Regimes

The lack of international political consensus has thwarted attempts made since 1977 to create an international legal document covering not only marine pollution, but also other important aspects relating to offshore units and their operation.<sup>45</sup>

The *Rio Draft Convention on Offshore Mobile Craft* was prepared in 1977 by the Comité Maritime International (CMI) at the request of the International Maritime Organization (IMO).<sup>46</sup> Due to other priorities, a further revised *Sydney Draft* was not adopted until 1994.<sup>47</sup> In the late 1990s the Maritime Law Association of the United States changed its initial supportive position and challenged the need for a comprehensive international treaty on offshore units and in 2001 each of the IMO and the CMI removed the subject from their respective work programmes.<sup>48</sup>

In 2004 a CMI working group was reactivated on the *Draft Offshore Units Convention 2001 (Canadian Draft)*.<sup>49</sup> The *Canadian Draft* is a more comprehensive document than the *Sydney Draft* and covers a range of aspects relating to offshore units, including registration and ownership, removal of offshore units, and liability for pollution damage arising from offshore activities.<sup>50</sup>

Attempts to implement a regime of civil liability for oil pollution from offshore units have also suffered from a lack of international political consensus in this area. The *Convention on Civil Liability for Oil Pollution Damage*

---

Pollution' (1983) 85 *Canadian Year Book of International Law*; Wilfred Jenks, 'Liability for Ultra-Hazardous Activities in International Law' 117 *Recueil des Cours* 99.

<sup>42</sup> International Law Commission, 'Report of the Working Group on International Liability for Injurious Consequences Arising out of Acts not Prohibited by International Law' (1978) *Yearbook of International Law Commission* 284 cited in Sompong Sucharitkul, 'State Responsibility and International Liability Under International Law' (1995-1996) 18 *Loyola Los Angeles International and Comparative Law Journal* 821 and AE Boyle, 'State Responsibility and International Liability for Injurious Consequences of Acts Not Prohibited by International Law: A Necessary Distinction?' (1990) 39 *International and Comparative Law Quarterly* 1.

<sup>43</sup> Handl, above n 41, 98-99; as Jenks, above n 41, 156 noted:

International law is not a limited body of specific rules, but a body of living principles and developing precedent growing with the needs of international society. Those who accept such a view of international law generally will find no difficulty in accepting the concept of general liability in international law for ultra-hazardous activities.

<sup>44</sup> Kelson, above n 41, 228.

<sup>45</sup> See Kashubsky, above n 14, 5-6; Michael White, 'Offshore Crafts and Structures: A Proposed International Convention' (1999) 18 *Australian Mining and Petroleum Law Journal* 21, 26.

<sup>46</sup> *Draft International Convention on Offshore Mobile Craft*, IMO Doc LEG/34/6(b), 19 December 1977 (not in force).

<sup>47</sup> *Draft Convention on Offshore Mobile Craft 1994*, (not in force). See Kashubsky, above n 14, 5; White, above n 45, 21-22.

<sup>48</sup> Kashubsky, above n 14, 5.

<sup>49</sup> *Draft Convention on Offshore Units, Artificial Islands and Related Structures Used in the Exploration for and the Exploitation of Petroleum and Seabed Mineral Resources 2001*, (not in force).

<sup>50</sup> Kashubsky, above n 14, 5-6.

resulting from *Exploration for and Exploitation of Seabed Mineral Resources 1977 (CLEE)*<sup>51</sup> seeks to implement the same regime of a strict, but limited, liability and compulsory liability insurance scheme system that applies to oil tankers under the *1992 Civil Liability and Fund Conventions*.<sup>52</sup> However, the *CLEE* has not attracted a sufficient number of ratifications to enter into force.

White (1999) notes the 'interesting situation' created by the evident desire in most CMI jurisdictions for a global convention regulating offshore units and the firm opposition of such a convention by other groups, most notably the International Association of Drilling Contractors supported by the United States.<sup>53</sup> White advocates the increasingly important need for regulation of offshore units in relation to subjects such as registration, mortgages, salvage, limitation of liability and liability for pollution.<sup>54</sup>

Kashubsky confirms that governments continue to be reluctant to take the initiative of creating a global regulatory regime that would cover all aspects of offshore oil and gas installations, preferring instead to rely on regional conventions and State legislation as being an effective way of regulating marine pollution from the offshore petroleum industry.<sup>55</sup>

### 3.1 European North Sea

For much of its early history, the European Community relied largely on the existence of international conventions to regulate the prevention and compensation of oil pollution damage.<sup>56</sup> In response to a number of major pollution incidents, notably the *Amoco Cadiz* (1978) and more recently the *Erika* (1999) and *Prestige* (2002) incidents, the European Commission became increasingly proactive in developing several initiatives aimed at preventing oil spills and to facilitate better compensation for oil pollution victims.<sup>57</sup> Increased European activism in this area has led to the rapid acceleration of the phasing out of single hull tankers, to enhanced oversight of classification societies, and has promoted the adoption of the *Supplementary Fund Protocol* to the international *1992 Fund Convention* in May 2003 which increases the total funds available to compensate victims of any oil pollution from tankers to USD 1 billion.<sup>58</sup>

However, this activity has focused on oil pollution from oil tankers with the regulation of offshore oil facilities within Europe historically remaining the province of individual member states. Existing EU legislation to regulate oil drilling is piecemeal and extends only to wells within the territorial seas, 12 miles off-shore, and either does not cover relevant areas, or only sets minimum performance requirements.<sup>59</sup>

Following the Macondo disaster the European Commission has proposed the development of a coherent legal framework for offshore oil and gas activities in Europe.<sup>60</sup> The proposed new measures would require member states to implement legislation requiring companies to use a higher standard of equipment, pay for damage for which they are not currently liable for under existing rules, and prove they have sufficient financial capacity to respond to and clear up after any pollution incident, before they can be licensed to drill.<sup>61</sup> The new rules would apply to all drilling sites within the exclusive economic zone, ie 200 miles of the coast, and would result in virtually all offshore oil drilling operations within the EU being covered. The planned rules have encountered

<sup>51</sup> *Convention on Civil Liability for Oil Pollution Damage resulting from Exploration for and Exploitation of Seabed Mineral Resources 1977 (Convention on Civil Liability for Oil Pollution Damage)*, 1977, 16 ILM 1451 (not yet in force).

<sup>52</sup> Constituted by the *International Convention Relating to Civil Liability for Oil Pollution Damage 1969*, 1969, 973 UNTS 3 (entered into force 19 June 1975) as amended in 1992 by the *Protocol to Amend the International Convention Relating to Civil Liability for Oil Pollution Damage 1969*, 1992, UKTS 1996 No 87 (entered into force 30 May 1996) and a *2000 Agreement to Increase Limits*, adopted 18 October 2000 (entered into force 1 November 2003); and the *1971 Convention on the Establishment of an International Fund for Compensation of Oil Pollution Damage*, 1969, 11 ILM 284 (entered into force 16 October 1978), as amended in 1992 by the *Protocol to Amend the International Convention Relating to Civil Liability for Oil Pollution Damage 1969*, 1992, UKTS 1996 No 87 (entered into force 30 May 1996) and a *2000 Agreement to Increase Limits*, 2000 (entered into force 1 November 2003), and further amended in 2003 by the *Protocol to Apply a Third Supplementary Fund*, 2003 (entered into force 3 March 2005).

<sup>53</sup> White, above n 45, 21, 26.

<sup>54</sup> *Ibid* 26.

<sup>55</sup> Kashubsky, above n 14, 6.

<sup>56</sup> Hui W 'Recent Developments in the EU Marine Oil Pollution Regime' in MG Faure and J Hu (eds), *Prevention and Compensation of Marine Pollution Damage* (Kluwer Law International, The Netherlands, 2006) 2.

<sup>57</sup> *Ibid* 2.

<sup>58</sup> *Ibid* 20, 22.

<sup>59</sup> Penelope Warne, 'The European Commission turns its attention to offshore oil and gas', *The Press and Journal – Energy* (online), 6 December 2010 <<http://energy.pressandjournal.co.uk/Article.aspx/2020684?UserKey=>>>.

<sup>60</sup> Fiona Harvey, 'Plans for tough European rules on oil spills come under attack', *The Guardian* (online), 19 April 2011, <<http://www.guardian.co.uk/environment/2011/apr/19/european-oil-spill-rules-under-attack>>.

<sup>61</sup> *Ibid*.

intense lobbying from the energy industry and national governments, with the UK at the forefront, and require the approval of member states and the European parliament before they can come into operation, a process likely to take at least two years.<sup>62</sup> In the meantime, oil pollution from offshore facilities remains the province of national legislation and existing measures, most principally the *Offshore Pollution Liability Agreement 1974*.

The *Offshore Pollution Liability Agreement 1974 (OPAL)*<sup>63</sup> is a voluntary agreement entered into by a number of oil companies which came into effect on 1 May 1975 and applies to offshore facilities within the European Union Coastal State jurisdiction and Norway and pursuant to which participating companies accept strict, but limited, liability for pollution damage and remedial costs arising from their operations. The limit of liability is currently USD250 million per incident.<sup>64</sup>

### 3.1.1 United Kingdom

Pursuant to the *Petroleum Act 1998* (UK), the exploration for, and production of, oil and gas in the United Kingdom and the UK sector of the North Sea can only be undertaken in accordance with the conditions of a licence issued by the UK Government.<sup>65</sup> The Secretary of State, on behalf of the UK Government, issues licences through annual licensing rounds. The Department of Energy and Climate Change is the department responsible for the regulation of all oil and gas licensing within the United Kingdom, its territorial sea and on the UK Continental Shelf.<sup>66</sup> The conditions of every issued licence are prescribed in a series of model clauses set out in Regulations in force when the licence is granted.<sup>67</sup> Licences issued after 6 April 2008 have model clauses as set out in the schedule to the *Petroleum Licensing (Production) (Seaward Areas) Regulations 2008*.<sup>68</sup>

The model clauses require all licensees to: (i) operate in accordance with the methods customarily used in good oilfield practice; and (ii) take ‘all steps practicable’ (a wide concept) to prevent the escape of oil in or new the licensed area. Licensees are required to have sufficient funds available to discharge any liability that they may accrue for damage in connection with any oil pollution.<sup>69</sup> Although licensees must keep the Secretary of State and the Department of Energy and Climate Change fully indemnified against all actions, proceedings, costs, claims and demands that may be brought by third parties in connection with the licence, the model clauses do not specify how this indemnity is to be achieved and the onus of establishing and maintaining the required insurance is entirely on the licensee. Following the Macondo incident the Department of Energy and Climate Change announced on 8 June 2010 that it would review the indemnity and insurance requirements for operating on the UK continental shelf.<sup>70</sup> More than one year since this announcement, the likely changes to the existing statutory regime and the timeframe for any such changes remain unclear.

Although *OPOL* is a voluntary agreement, in practice membership of *OPOL* by UK offshore operators is unavoidable because licensees cannot appoint an operator without the consent of the Department of Energy and Climate Change and operator membership of *OPOL* is a prerequisite for obtaining departmental consent.<sup>71</sup> It is further reinforced by the inclusion of a standard *OPOL* Clause in all joint operating agreements. The operator must establish and maintain its financial capability to meet claims that arise under *OPOL* by producing evidence of insurance, self-insurance or other satisfactory measures, with the financial responsibility to meet such capability allocated contractually between the operator and non-operators under a joint operating agreement.<sup>72</sup>

---

<sup>62</sup> Ibid.

<sup>63</sup> *Offshore Pollution Liability Agreement 1974*, 1974, 13 ILM 1403 (entered into force 1 May 1975).

<sup>64</sup> Offshore Pollution Liability Association Ltd, ‘About *OPOL*’ <<http://www.opol.org.uk/about.htm>> at 12 December 2010.

<sup>65</sup> *The Petroleum Act 1998* (UK) consolidated the *Petroleum (Production) Act 1934* (UK) and the *Continental Shelf Act 1964* (UK), cited in Jubilee Easo, ‘Managing the risk of catastrophic events on the UK continental shelf’ (2010) 7 *Ashurst Energy Source* 18.

<sup>66</sup> Department of Energy and Climate Change (UK), *Oil and Gas*

<[http://www.decc.gov.uk/en/content/cms/meeting\\_energy/oil\\_gas/oil\\_gas.aspx](http://www.decc.gov.uk/en/content/cms/meeting_energy/oil_gas/oil_gas.aspx)> at 30 June 2011.

<sup>67</sup> Easo, above n 65, 18.

<sup>68</sup> Ibid 18.

<sup>69</sup> Ibid 18.

<sup>70</sup> DECC, ‘UK increases North Sea rig inspections’ (Press Release, 10/067, 8 June 2010)

<[http://www.decc.gov.uk/en/content/cms/news/pn10\\_067/pn10\\_067.aspx](http://www.decc.gov.uk/en/content/cms/news/pn10_067/pn10_067.aspx)> at 30 June 2011.

<sup>71</sup> *Petroleum (Production) (Seaward Areas) Regulations 1988* (UK) cl 23(9).

<sup>72</sup> Offshore Pollution Liability Association Limited, *Offshore Pollution Liability Association Limited Rules (as at 1st October 2010)*, <<http://www.opol.org.uk/rules-2.htm>> at 30 June 2011.

### 3.2 Gulf of Mexico – United States

There is no uniform regime that applies across all State jurisdictions in the Gulf of Mexico with respect to the regulation of marine oil pollution from offshore oil facilities. As the acknowledged industry leader with the most sophisticated legislative regime applicable to the development of offshore oil fields in the Gulf of Mexico, the regime that applies in the United States will be examined.

The United States government authority responsible for managing the offshore oil and gas resources of the US is a bureau within the US Department of the Interior known as the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE). The *Outer Continental Shelf (OCS) Lands Act 1953* authorizes the Secretary of the Interior to grant offshore leases and to prescribe regulations governing oil and natural gas activities on the OCS.<sup>73</sup>

The *Oil Pollution Act 1990 (OPA 1990)* is the United States statute governing liability for oil pollution within the United States, including any marine pollution caused by offshore oil facilities in the OCS. The law sets out a suite of requirements designed to improve the safety of vessels and oil transport facilities, including technology and reporting requirements, and renders operators liable for three broad classes of costs: response and cleanup costs, damages to private property, and damages to public natural resources (natural resource damages or 'NRDs').<sup>74</sup> *OPA 1990* imposes strict liability for oil pollution, 'channels' liability by specifying the responsible party (in the case of offshore facilities, the holder of the drilling permit), and limits liability up to USD75 million (subject to certain limited exceptions).<sup>75</sup> Damages in excess of this limit of up to USD1 billion per incident may be paid by the Oil Spill Liability Trust Fund, which is financed primarily through a fee on domestic and imported crude oil.<sup>76</sup>

As a pre-condition for operation, *OPA 1990* requires financial assurance akin to mandatory insurance or minimum capitalization requirements which are designed to ensure that responsible parties have the funds necessary to pay for damages.<sup>77</sup> In relation to offshore facilities used for oil exploration, drilling, production, or transport, *OPA 1990* prescribes, among other things, implementation schedules, types of facilities to which the financial assurance rules apply, financial instruments with which compliance can be achieved, minimum coverage requirements, and enforcement procedures.<sup>78</sup> Relevantly, operators of offshore oil facilities are required to demonstrate oil spill financial responsibility (OSFR) coverage in accordance with the regulations promulgated under *OPA 1990*.<sup>79</sup> The financial assurance liability limits for offshore facilities are based on a calculation of the volume of a 'worst case' oil spill discharge with there being four types of 'allowable mechanism' that can be used by entities to demonstrate the existence of coverage: insurance, surety bond, self-insurance and financial guarantee. All four of the mechanisms are intended to ensure that pollution liabilities can be satisfied, up to the statutory coverage requirements.<sup>80</sup> The latest regulations became effective on 13 October 1998 and establish a maximum ceiling to the required OSFR coverage of USD150 million. Applying the calculation under the regulations, the required OSFR coverage may be considerably less than USD150 million. In relation to producing wells the worst case oil spill discharge potential is calculated as four times the uncontrolled flow volume estimated for the first twenty four hours of production. For new wells the worst case oil spill discharge potential is deemed to be over 1 000 barrels. The required OSFR coverage is then determined in accordance with the following table.<sup>81</sup>

---

<sup>73</sup> BOEMRE, *Oil and Gas Leasing on the Outer Continental Shelf*, <[http://www.boemre.gov/PDFs/5BOEMRE\\_Leasing101.pdf](http://www.boemre.gov/PDFs/5BOEMRE_Leasing101.pdf)> at 28 June 2011.

<sup>74</sup> James Boyd, 'Compensation for Oil Pollution Damages: The American Oil Pollution Act as an example for Global Solutions?' in MG Faure and J Hu (eds), *Prevention and Compensation of Marine Pollution Damage* (Kluwer Law International, The Netherlands, 2006) 137.

<sup>75</sup> Richardson, above n 1, 2.

<sup>76</sup> *Ibid* 2; Kyriaki Noussia 'Environmental Pollution Liability and Insurance Law Ramifications in Light of the Deepwater Horizon Oil Spill' (Paper presented at 2010 Hamburg Lectures on Maritime Affairs, Hamburg, 27 October 2010).

<sup>77</sup> Boyd, above n 74, 138.

<sup>78</sup> *Oil Pollution Act of 1990* §1016, codified at 30 C.F.R. part 253, cited in Boyd, above n 74, 158.

<sup>79</sup> BOEMRE, *NTL-2008-N05 - Guidelines for Oil Spill Financial Responsibility (OSFR) for Covered Facilities (effective August 26, 2008)* (replaces *NTL 99-N01 and NTL 99-N01 Addendum 1*) <<http://www.gomr.boemre.gov/homepg/lseale/osfr.html>> at 28 June 2011.

<sup>80</sup> Boyd, above n 74, 158.

<sup>81</sup> BOEMRE, *The OSFR Coverage Requirements Based on Oil-Spill Discharge*, <<http://gomr.boemre.gov/homepg/lseale/spill.html>> at 28 June 2011.

COF Worst Case Oil-Spill Discharge Volume	Applicable Amount of OSFR
Over 1 000 up to 35 000 barrels	USD35 000 000
Over 35 000 but not more than 70 000 barrels	USD70 000 000
Over 70 000 but not more than 105 000 barrels	USD105 000 000
Over 105 000 barrels	USD150 000 000

Under *OPA 1990*, natural resource damages (NRDs) are also recoverable and these are calculated as the assessed damages to land, fish, wildlife, biota, air, water, groundwater, and other resources.<sup>82</sup> The definition of NRDs is restricted to resources that are, to a substantial degree, owned or controlled or managed by federal, state, or other governmental entities, including foreign governments.<sup>83</sup> Liability for NRDs has three components: first, the cost of resource restoration to baseline conditions; second, compensation for 'interim losses', that is, the lost value of injured resources pending full restoration; and third, the reasonable cost of the damage assessments themselves.<sup>84</sup>

### 3.3 Australasia

Again, there is no uniform regime that applies with respect to the regulation of marine oil pollution from offshore oil facilities across all State jurisdictions in Australasia. As a representative sample of the legislative regimes that apply to offshore oil fields within Australasia, the regimes that apply in Australia and China will be examined.

#### 3.3.1 Australia

Responsibility for the regulation of Australia's offshore petroleum activities in areas beyond three nautical miles from the territorial sea baseline (Australian Commonwealth waters) rests with the Department of Resources, Energy and Tourism - a Department of the Australian federal government.<sup>85</sup> The day-to-day administration of offshore petroleum titles is the responsibility of the state or territory immediately adjacent to the offshore waters in which the petroleum activities are being undertaken (the designated authority).<sup>86</sup>

The *Offshore Petroleum and Greenhouse Gas Storage Act 2006 (OPGGSA 2006)* provides the governing legislative framework for all offshore oil and gas exploration and production in Australian Commonwealth waters.<sup>87</sup> Any operator seeking to conduct petroleum activity must first submit an environmental plan (EP) and an oil spill contingency plan (OSCP) for review and acceptance by the applicable designated authority.<sup>88</sup> Importantly, although *OPGGSA 2006* requires the holder of a petroleum title to maintain adequate insurance against expenses or liabilities arising from activities in the title (including expenses relating to clean-up or other remedying of the effects of the escape of petroleum), the amount and terms required for any such insurance are as may be prescribed from time to time by the designated authority or as may be included as conditions in the licence on a case by case basis.<sup>89</sup>

The legislation in Australia governing the regulation of offshore oil facilities has undergone intense scrutiny since the Montara well blowout. The inquiries that followed the incident have highlighted shortcomings in operational practice and how the industry is regulated, and legislative changes have been called for principally driven by a desire to improve safety and operational practices. In particular, the Montara Commission of Enquiry:

<sup>82</sup> *Oil Pollution Act of 1990*, 33 USC §2701(20) cited in Boyd, above n 74, 140.

<sup>83</sup> *Oil Pollution Act of 1990*, 33 USC §1001(20) cited in Boyd, above n 74, 140.

<sup>84</sup> *Oil Pollution Act of 1990*, 33 USC §1001(5) §1002(b)(2) cited in Boyd, above n 74, 140.

<sup>85</sup> Department of Resources, Energy and Tourism, *Upstream Petroleum* (2011) <[http://www.ret.gov.au/RESOURCES/UPSTREAM\\_PETROLEUM/Pages/UpstreamPetroleum.aspx](http://www.ret.gov.au/RESOURCES/UPSTREAM_PETROLEUM/Pages/UpstreamPetroleum.aspx)>.

<sup>86</sup> Department of Resources, Energy and Tourism, *Joint Authority/Designated Authority Fact Sheet* (2011) <<http://www.ret.gov.au/Documents/par/fact/documents/Joint%20Authority.pdf>> at 12 December 2010.

<sup>87</sup> Department of Resources, Energy and Tourism, *Guidelines for the preparation and submission of an Environment Plan under the Petroleum (Submerged Lands)(Management of Environment) Regulations 1999* (2011) <<http://www.ret.gov.au/resources/Documents/Offshore%20Petroleum%20Environment/Guidelines%20for%20the%20Preparation%20and%20Submission%20of%20an%20Environment%20Plan-%20October%202008.pdf>> at 30 June 2011.

<sup>88</sup> *Ibid*, citing *Petroleum (Submerged Lands)(Management of Environment) Regulations 1999* (Cth) r 14(8).

<sup>89</sup> *Offshore Petroleum and Greenhouse Gas Storage Act 2006* (Cth) s 571.

- i. found that, in order for the EP regime to embody the ‘polluter pays’ principle, regulatory authorities needed to be satisfied that companies had adequate insurance to meet their obligations and ‘no fault’ penalties needed to be in place for pollution; and
- ii. recommended that the obligation of companies involved in an incident to meet the full costs of monitoring and remediation should be made a condition of approval of proposals under the *OPGSSA 2006* and that suitable arrangements (insurance or otherwise) should be in place to ensure companies have this capacity.<sup>90</sup>

On 25 May 2011, the Minister for Resources and Energy, Martin Ferguson, introduced five Bills into Parliament that modify *OPGSSA 2006* and related laws. These Bills seek to establish a single Commonwealth regulator and also exclude the operation of the personal property securities legislation.<sup>91</sup> In addition there has been the very recent consolidation of the *OPGSSA* Regulations that took place with effect from 29 April 2011.

These actions represent a further step in the Australian Commonwealth Government’s reforms which began in 2010. The intent is for the new administrative architecture to be in place by 1 January 2012.<sup>92</sup> The key aim of these reforms is to replace the complex joint state/Commonwealth arrangements with a Commonwealth system of regulation. The four Bills read into parliament on 25 May 2011:<sup>93</sup>

1. establish the National Offshore Petroleum Titles Administrator (NOPTA);
2. expand the functions of the National Offshore Petroleum Safety Authority (NOPSA) and rename it as the National Offshore Petroleum Safety and Environmental Management Authority (NOPSEMA);
3. regularise and ensure sufficient enforcement powers in relation to NOPSEMA’s expanded functions; and
4. revise the financial arrangements existing between the States and the Commonwealth and impose new levies on industry.

As a result of reforms made in 2010, the regulatory oversight function of the rebadged NOPSEMA is expanded to cover the non-OHS aspects of integrity for facilities, wells and well-related equipment, and its role further expanded in the current Bills to include management of the environment and regulation of day-to-day petroleum operations. The state and territory governments’ residual role will be as part of a ‘Joint Authority’ participating in key decisions. However all advice to the Joint Authority will come from either NOPSEMA or NOPTA, with the former ‘Designated Authority’ ceasing to exist.

The consolidation of the offshore petroleum regulations under the *OPGSSA* is now essentially complete with these Bills and results in significant changes to field development plans (FDP). Previously the requirements in relation to FDPs were found in non-binding guidelines. There are now some substantive changes effected by the Regulations:

1. non-compliance with an FDP is subject to specific sanction, in many instances, by strict liability offences;
2. applications for production licences must now be accompanied by an FDP;
3. before an FDP can be approved, it must address specifically prescribed matters (NB: none of which address any insurance requirements);
4. ‘major changes’ to an FDP require approval on at least 90 days notice; and

---

<sup>90</sup> Montara Commission of Inquiry, *Report of the Montara Commission of Inquiry*, (2010), 370, 373.

<sup>91</sup> *Offshore Petroleum and Greenhouse Gas Storage (National Regulator) Amendment Bill 2011* (Cth); *Offshore Petroleum and Greenhouse Gas Storage Regulatory Levies Legislation Amendment (2011 Measures No. 2) Bill 2011* (Cth); *Offshore Petroleum and Greenhouse Gas Storage (a Registration Fees (Amendment Bill 2011)) 2011* (Cth); *Offshore Petroleum (Royalty) Amendment Bill 2011* (Cth).

<sup>92</sup> Stuart Barrymore and Rupert Baker, *Offshore Oil & Gas regulatory reform* (2011) Freehills

<<http://www.freehills.com.au/Print/7191.aspx>> at 22 June 2011.

<sup>93</sup> *Ibid.*

5. titleholders must notify the Department of Resources, Energy and Tourism in relation to a 'significant event'.

Although there has been some political resistance to these reforms, in particular from the State of Western Australia which favours continuing with the previous arrangements, the reforms are responsive to, and consistent with the recommendations of the Montara inquiry and the generally held view within industry that it is better to have one point of regulation. Further, the separation of the regulatory function (NOPSEMA) from the promotional function (NOPTA) is generally regarded as best practice and eliminates the risk or perception of a regulatory conflict of interest.<sup>94</sup>

That being said, the specific recommendations made by the Montara Commission of Inquiry in relation to the imposition of strict liability and the placement of insurance for the costs of an offshore oil pollution incident have not, as yet, been specifically addressed by these reforms. Accordingly, the position remains that the amount and terms required for any such insurance are as may be prescribed from time to time by the designated authority or as may be included as conditions in the licence on a case by case basis.

### 3.3.2 China

In China, the State Oceanic Administration (SOA) is the national authority vested with responsibility for the investigation, monitoring, observation, appraisal and scientific research of the marine environment.<sup>95</sup> The SOA is the competent authority with oversight of the Administrative Regulations on Environmental Protection on Ocean Exploration and Exploitation (REPOE) which were promulgated on 29 December 1983 and apply to enterprises, institutions, and individuals engaged in ocean oil exploration and exploitation within the seas under China's administration, as well as fixed platforms, movable platforms and other related facilities.<sup>96</sup>

China has acceded to the 1969 and 1992 *Civil Liability and Fund Conventions*, but the 1992 *Fund Convention* only applies to the Hong Kong Special Administrative Region. There is no specialized legislation in China which regulates oil pollution damage and the compensation for such pollution remains a complex issue in Chinese practice with the amount of liability largely depending on the local Chinese court's decision concerning the applicable law and factual determination on the applicable evidence.<sup>97</sup>

The two main pieces of legislation in China concerning liability and compensation for oil pollution is the *China Maritime Code* and the *Marine Environment Protection Law*.<sup>98</sup>

The limitation of liability for maritime claims is dealt with in Chapter XI of the *China Maritime Code*, art 208 of which specifically provides that the provisions of the Chapter do not apply to 'claims for oil pollution damage under the *International Convention on Civil Liability for Oil Pollution Damage* to which the People's Republic of China is a party'. Accordingly, all internationally navigating ships are subject to the limitations provided under the *Civil Liability and Fund Conventions*, irrespective of the vessel's nationality.<sup>99</sup> Otherwise, all maritime claims, including claims relating to marine pollution, are subject to the lower limitations set forth in the *China Maritime Code*.<sup>100</sup>

The revised *Marine Environment Protection Law* took effect on 1 April 2000 with the most important provision in respect of marine oil pollution, Article 66, providing as follows:

The state shall make perfect and implement the system of compensation for civil liability for pollution damages caused by vessels, establish principles of liability to be shouldered jointly by shipowners and cargo owners in accordance with liability for pollution damage caused by vessels, and establish marine insurance for pollution and a system of compensation for oil pollution damages.

---

<sup>94</sup> Ibid 2.

<sup>95</sup> G Ping and Lujun Zhao, 'The Legal Protection of the Marine Environment in China: Current Situation and Challenges' in Faure MG and Hu J (eds), *Prevention and Compensation of Marine Pollution Damage* (Kluwer Law International, The Netherlands, 2006) 287.

<sup>96</sup> Ping and Lujun, above n 95, 289.

<sup>97</sup> Michael Faure and Wang Hui, 'Financial Caps for Oil Pollution Damage' in Faure MG and Hu J (eds), *Prevention and Compensation of Marine Pollution Damage* (Kluwer Law International, The Netherlands, 2006) 328-329.

<sup>98</sup> Ibid 330.

<sup>99</sup> Ibid 330.

<sup>100</sup> Ibid 330.

The regulation envisaged by the *Marine Environment Protection Law* was not issued for over nine years until the *Prevention and Control of Marine Pollution from Ships Regulation* was enacted in September 2009, establishing a compensation fund and compulsory insurance regime for oil pollution damage from all ships (except those less than 1 000gt and not carrying oil cargoes).<sup>101</sup> This Regulation came into effect on 1 March 2010 and provides the implementing legislation giving effect to the insurance provisions of the *1992 Civil Liability and Fund Conventions* and the *2001 Bunker Convention*.<sup>102</sup>

In relation to oil pollution from offshore oil facilities, it remains the position in practice that no compensation fund has been set up to date and compulsory insurance has not been implemented.<sup>103</sup> As a result, there is currently no reliable financial source in China to compensate for marine oil pollution damage arising from offshore oil facilities.<sup>104</sup>

### 3.4 West Africa – Nigeria

The regulation and licensing of oil operations offshore Nigeria falls under the aegis of the Ministry of Petroleum Resources.<sup>105</sup> Technical administration of offshore licensing is the province of the Department of Petroleum Resources, a department within the Ministry of Petroleum Resources.<sup>106</sup> Licences are managed pursuant to a production sharing contract (PSC) between the Nigerian National Petroleum Corporation and the relevant operator (typically a large multinational oil company) and the other joint venture participants. *The Deep Offshore and Inland Basin Production Sharing Contracts Act No. 9 1999* governs PSCs in Nigeria and sets out the general framework for the operation of PSCs, including the applicable royalties, tax regimes, and the manner in which costs and profits are allocated between the parties.<sup>107</sup> Relevantly, this law does not address or prescribe any insurance requirements which are therefore left to be negotiated and managed within the terms of the applicable PSC.

The National Oil Spill Contingency Plan purports to be Nigeria's comprehensive action plan for liabilities and response action in spill situations pursuant to Nigeria's adoption of the *International Convention on Oil Pollution Preparedness, Response and Co-operation 1990*.<sup>108</sup> Other environmental protection legislation includes the *National Environmental Standards and Regulations Enforcement Agency Act* which repealed the *Federal Environmental Protection Agency Act* (upgraded to the Federal Ministry of Environment), *Environmental Impact Assessment Act*, the *National Oil Spill Detection and Response Agency Act 2005*, the *Harmful Wastes (Special Criminal Provisions) Act of 1988 (Harmful Wastes Act)* and the *Environmental Guidelines and Standards for the Petroleum Industry in Nigeria* published by the Department of Petroleum Resources.<sup>109</sup>

This pastiche of legislation purports to adopt the 'polluter pays' principle and create a strict regime prohibiting the discharge in harmful quantities of any hazardous substances to the environment, except where permitted or authorised by law, and to render the party responsible for the pollution liable to remediate any contamination of the environment and to compensate those who suffer loss and damage as a result of any pollution.<sup>110</sup>

Although these laws exist, they are typically not enforced in practice and have been criticized as failing to adequately protect the environment and the victims of pollution from the adverse consequences of oil pollution. Identified shortcomings include the out-dated penalty sections, the attitude of enforcement officials and the attitude of the courts. The imposition of liability for any pollution is left to the availability of common law

---

<sup>101</sup> UK P&I Club, *Chinese Oil Pollution* (2011) UK P&I Club <<http://www.ukpandi.com/knowledge-developments/industry-developments/chinese-oil-pollution/>> at 9 July 2011.

<sup>102</sup> *Ibid.*

<sup>103</sup> Faure and Hui, above n 97, 330-331.

<sup>104</sup> *Ibid.* 331-332.

<sup>105</sup> Ministry of Petroleum Resources, *Functions and Responsibilities* (2011)

<[http://www.mpr.gov.ng/index.php?option=com\\_content&view=article&id=20&Itemid=4](http://www.mpr.gov.ng/index.php?option=com_content&view=article&id=20&Itemid=4)> at 30 June 2011.

<sup>106</sup> Ministry of Petroleum Resources, *Petroleum Resources* (2011)

<[http://www.mpr.gov.ng/index.php?option=com\\_content&view=article&id=1&Itemid=12](http://www.mpr.gov.ng/index.php?option=com_content&view=article&id=1&Itemid=12)> at 30 June 2011.

<sup>107</sup> Madaki Ameh, 'The Nigerian oil and gas industry: from joint ventures to production sharing contracts', *Holler Africa* (online), 4 July 2011 <<http://www.hollerafrica.com/showArticle.php?artId=85&catId=2&page=3>>.

<sup>108</sup> Humphrey Onyeukwu, 'The Deepwater Horizon Spillage and Lessons in Liability Claims for Nigeria', *The Nigeria Business.com* (online), 25 May 2010 <<http://www.thenigeriabusiness.com/column22.html>>.

<sup>109</sup> *Ibid.*

<sup>110</sup> *Ibid.*

remedies such as the torts of nuisance, trespass, negligence or the rule in *Rylands V Fletcher* rather than by the application of the statutory remedies provided under the relevant statutes.<sup>111</sup>

It is evident from the foregoing that there is no clearly defined liability regime and no reliable financial source in Nigerian offshore oil operations to compensate for marine oil pollution damage.

#### 4.0 Pollution Liability Requirements under Industry Standard Forms of Joint Operating Agreements and Oilfield Services Agreements

Relevant to the consideration of the responsibility of operators of offshore facilities involving multiple joint venture parties, an analysis will be undertaken of the pollution liability requirements under the standard forms for each of the:

1. joint operating agreements that typically apply in these regions and govern the obligations owed by operators with respect to the joint venture operations; and
2. contractual terms that apply between operators and contractors providing oilfield services to the joint venture operations.

#### 4.1 Joint Operating Agreement Standard Terms

The joint operating agreement (JOA) is the contractual mechanism that allocates liability arising in relation to the licensed operations between each of the joint venturers on the licence, typically in proportion to each joint venturer's respective percentage interest in the licensed operations.

The standard form of JOA that is most prevalent in offshore operations internationally is the *Association of International Petroleum Negotiators' Model International Operating Agreement* dated 2002 (the *AIPN Standard JOA*) and in the UK continental shelf it is the *Oil and Gas UK Standard Form Joint Operating Agreement* dated January 2009 published by the representative body for the UK offshore oil and gas industry, Oil & Gas UK (the *UK Standard JOA*).<sup>112</sup>

Under each of the *AIPN Standard JOA* and the *UK Standard JOA* the party fulfilling the role of operator is required to conduct the operations in a proper, workmanlike manner and in accordance with 'good oilfield practice', a term that is typically defined as:

the application of methods and practices customarily used in good and prudent oil and gas field practice on the [UK continental shelf] with that degree of diligence and prudence reasonably and ordinarily exercised by operators engaged on the [UK continental shelf] in a similar activity under similar circumstances and conditions.<sup>113</sup>

The *UK Standard JOA* requires the operator to obtain and maintain all insurance required under the licence and any other applicable law. As the UK model clauses under the licence are silent on the subject, the only essential insurance that the operator must procure is against liability for pollution events under *OPOL*. The operator must take all reasonable steps to ensure that all contractors performing work in relation to the licensed operations obtain and maintain all insurance required by law and under the licence (again, unstated on the face of the model clauses). Operators may take out other insurance at their discretion to cover clean-up costs associated with a catastrophic event and non-operators may participate in any such insurance depending upon the terms of the joint operating agreement and if the applicable insurers agree to such participation.<sup>114</sup>

Similarly, the *AIPN Standard JOA* requires the operator to obtain and maintain all insurance required under the licence and any other applicable law and such other insurance as may be required by the operating committee established under the *JOA*.<sup>115</sup> The operator must use 'reasonable endeavours' to ensure that all contractors performing work in relation to the licensed operations obtain and maintain all insurance required under the

---

<sup>111</sup> Ibid.

<sup>112</sup> Association of International Petroleum Negotiators, <<https://www.aipn.org/>> at 30 June 2011; Oil & Gas UK, *Joint Operating Agreement* <<http://www.oilandgasuk.co.uk/publications/viewpub.cfm?frmPubID=250>> at 2 July 2011; Easo, above n 65, 19.

<sup>113</sup> AIPN Standard JOA cl 4.2(B)(2); Easo, above n 65, 20.

<sup>114</sup> Easo, above n 65, 20.

<sup>115</sup> AIPN Standard JOA cl 4.7(A) and (B).

licence or by law.<sup>116</sup> Significantly, any member of the joint venture may elect not to participate in the insurance procured by the operator and may instead rely on its own insurance arrangements or other evidence of financial responsibility which the operating committee determines to be acceptable.<sup>117</sup> Further, the operator may elect to self-insure to the extent permitted by the license or applicable law and is only required to provide evidence of financial responsibility in such cases if requested to do so by the operating committee and then only to the reasonable satisfaction of the operating committee.<sup>118</sup>

Based on the principle that the operator does not make a profit for undertaking the operatorship role additional to the anticipated profit from its participating interest in the licence, the JOA almost invariably provides that the operator is not liable for, and is entitled to be indemnified by the other non-operating joint venturers to the extent of each of their respective participating percentage interests from liability for any third party claims for losses arising from the licensed operations, including if arising due to the operator's negligence.<sup>119</sup> Liability arising from the operator's 'willful misconduct' may be and is typically excluded from such protection and some joint operating agreements also exclude liability arising from the operator's 'gross negligence'.<sup>120</sup> Each of these exclusions are specifically defined concepts within the applicable joint operating agreement and whether any particular factual circumstances fall within the applicable contractual definition is often fraught with uncertainty and beset with legal disputation.<sup>121</sup>

With the advent of the Macondo and Montara incidents, there is likely to be more emphasis on and scrutiny of (i) the extent of the insurance arrangements that the operator establishes in respect of the joint operations, and (ii) the allocation of pollution liabilities in subcontracts, particularly drilling contracts, that the operator negotiates on behalf of all license co-venturers.<sup>122</sup>

#### 4.2 Standard Contractual Terms for the Provision of Oilfield Services to Joint Venture Operations

In terms of the services involving a risk of oil pollution emanating from offshore oil wells, contracts for the provision of drilling services and well services are of most immediate relevance. The standard form of contracts that are most prevalent in offshore drilling and well servicing operations internationally are the International Association of Drilling Contractors' (IADC) Standard Form of International Offshore Daywork Drilling Contract (the IADC Standard Drilling Contract) and the Association of International Petroleum Negotiators' International Model Well Services Agreement dated 2002 (the AIPN Standard Well Services Contract). In the UK continental shelf the generally adopted standard forms of contract are promulgated by LOGIC (Leading Oil and Gas Competitiveness), a non-profit, wholly-owned subsidiary of Oil & Gas UK created in 1999 by the Government's Oil and Gas Industry Task Force to improve competitiveness in the UKCS by targeting efficiencies in the supply chain.<sup>123</sup> The relevant LOGIC standard forms are the General Conditions of Contract for Mobile Drilling Rigs dated December 1997 (the LOGIC Standard Drilling Contract) and the LOGIC General Conditions of Contract for Well Services dated March 2001 (the LOGIC Standard Well Services Contract).

Each of the IADC Standard Drilling Contract, the AIPN Standard Well Services Contract, the LOGIC Standard Drilling Contract and the LOGIC Standard Well Services Contract are consistent in the apportionment of risk for any pollution arising from the offshore operation. In all of these standard forms the JOA operator enjoys the benefit of an indemnity from the contractor with respect to any pollution originating specifically from the contractor's offshore unit and the contractor enjoys the benefit of an indemnity from the JOA operator in relation to all other pollution, including any pollution emanating from the well or the reservoir, and any well blowout, with these indemnities applying irrespective of any negligence or breach by the indemnified party.<sup>124</sup> In other words, the exposure associated with any well blowout or pollution from the well or reservoir arising from the offshore operations is passed to the JOA operator by virtue of the contractual indemnity mechanisms

<sup>116</sup> AIPN Standard JOA cl 4.7(H).

<sup>117</sup> AIPN Standard JOA cl 4.7(D).

<sup>118</sup> AIPN Standard JOA cl 4.7(E).

<sup>119</sup> Easo, above n 65, 20-21; AIPN Standard JOA, cl 4.2(B)(4) and 4.6.

<sup>120</sup> Easo, above n 65, 21; AIPN Standard JOA cl 4.7(C).

<sup>121</sup> Business Desk, 'Deepwater Horizon partner seeks to drill in NZ by Christmas', *NZ Herald* (online), 8 June 2011 <[http://www.nzherald.co.nz/business/news/article.cfm?c\\_id=3&objectid=10730938](http://www.nzherald.co.nz/business/news/article.cfm?c_id=3&objectid=10730938)>.

<sup>122</sup> Easo, above n 65, 22.

<sup>123</sup> LOGIC, *Governance for Standard Industry Solutions* (2011) Oil & Gas UK LOGIC <<http://www.logic-oil.com/about.cfm>> at 2 July 2011.

<sup>124</sup> IADC Standard Drilling Contract, art IX; AIPN Standard Well Services Contract, cl 13.2.5, 13.2.10; LOGIC Standard Drilling Contract, cl 18.3, 18.4 and 18.6; LOGIC Standard Well Services Contract, cl 19.3, 19.4 and 19.9.

within the industry-standard forms, even if such exposure is made manifest by the fault or negligence of the drill rig or well service contractor.

The position under each of the standard forms in relation to the insurances required to be placed by each of the parties is not so clear cut. Each of the IADC Standard Drilling Contract, the AIPN Standard Well Services Contract, and the LOGIC Standard Drilling Contract require the contractor to provide protection and indemnity (P&I) insurance cover, including for any pollution liability, up to an amount to be agreed and stated in each of the standard forms on a case by case basis.<sup>125</sup> The LOGIC Standard Well Services Contract is, somewhat unusually, as most offshore well services will typically involve the use of a vessel, silent on any requirement for P&I insurance and instead requires the contractor to provide general third party liability insurance, again for an amount to be agreed and stated on a case by case basis in the applicable contract.<sup>126</sup>

Importantly, all of the standard forms except for the AIPN Standard Well Services Contract are silent on any requirement for the JOA operator to provide insurance, including any requirement to place any insurance to cover any well- or reservoir-related pollution. The AIPN Standard Well Services Contract includes the requirement for the JOA operator to place such insurance as an optional alternative and then only for whatever amount is agreed and stated on a case by case basis.<sup>127</sup> Given the fact that the contractor's P&I insurance will typically exclude from cover any liability for oil pollution from the well or reservoir (see section 5(a) below) and the resultant criticality to the contractor of the benefit of the pollution indemnity from the JOA operator, the failure to include a clear and unequivocal stipulation for the JOA operator to place insurance to cover well- or reservoir-related pollution is a glaring omission from the standard forms. It also compounds the lack of clarity and certainty under the industry-standard JOA forms on what insurance the operator is in fact required to ensure is in place for any pollution arising from the offshore operations (see section 4(a) above).

## 5.0 Insurance for Marine Pollution from Offshore Oil Facilities – Policy Terms and Available Coverage

The policy terms of the most immediately relevant liability policies will now be examined, namely the international group of P&I Clubs and the industry standard wording for operator's extra expense and pollution liability insurance. Available insurance industry data and statistics maintained by the international group of P&I Clubs and the major global brokerage houses will also be analysed to assess the amounts of liability insurance cover that, subject to policy terms, may be generally available to respond to any marine pollution arising from offshore facilities.

### 5.1 P&I Clubs – Standard Terms of Cover for Pollution

Protection and indemnity insurance (P&I) is a form of marine insurance provided by a P&I Club. A P&I Club is a mutual (i.e. co-operative) insurance association that provides cover for its members, who will typically be ship-owners, ship-operators or demise charterers, and owners and operators of mobile offshore units (MOUs), including drilling rigs. P&I Clubs provide insurance cover for broad indeterminate risks, such as third party liabilities, including a carrier's liability to a cargo-owner for damage to cargo, a ship's liability after a collision, environmental pollution and war risk insurance.<sup>128</sup>

The major P&I Clubs (thirteen in all) are members of the International Group of P&I Clubs, the functions of which are threefold:<sup>129</sup>

1. co-coordinating the operation and regulation of the clubs' claim-sharing agreement (the Pooling Agreement) whereby all qualifying claims in excess of USD8 million are shared between clubs in accordance with the terms of the Pooling Agreement by which the clubs reinsure each other for claims in excess of USD8 million;
2. representation of member P&I Clubs on important industry issues, for example on relevant conventions and before inter-governmental and national bodies; and

<sup>125</sup> IADC Standard Drilling Contract art X; AIPN Standard Well Services Contract cl 14.3.2; LOGIC Standard Drilling Contract cl 19.2(d).

<sup>126</sup> LOGIC Standard Well Services Contract cl 20.2(b).

<sup>127</sup> AIPN Standard Well Services Contract cl 14.1, 14.2.

<sup>128</sup> International Group of P&I Clubs, *Home Site* (2011) <<http://www.igpandi.org/Home>> at 30 June 2011.

<sup>129</sup> International Group of P&I Clubs, *The Role of the Group* (2011) <<http://www.igpandi.org/About>> at 30 June 2011.

3. provide a forum for the exchange of information.

As a result of this cooperation, there is commonality in the terms of the insurance cover provided by all member P&I Clubs.

The cover provided under P&I insurance is broadly intended to cover the assured member's liability for loss of or damage arising from marine oil pollution. However, P&I cover does not extend to a number of the pollution risks which assured members face and there are some large gaps in the cover available for the liabilities that may potentially arise from offshore operations.

Most significantly, standard P&I terms exclude loss arising from any damage to 'contract works', including any pollution caused by such damage. 'Contract works' are construed to mean the wells, wellheads and other subsea equipment in relation to which the offshore oil facility (drill rig, etc.) is working.<sup>130</sup>

Similarly, any pollution arising from any well is excluded from cover, with the definition of 'well' including the wellheads and well control equipment (such as any blow-out preventer).<sup>131</sup>

As a result, and somewhat worryingly, pollution arising from any loss of or damage to the well, wellheads, or other subsea equipment that may be caused by the offshore facility during its normal installation operations is excluded from cover under the industry-standard P&I insurance terms of cover.

This means that contractors of offshore oilfield service facilities are entirely reliant upon the protection provided by the industry-standard contractual pollution indemnity that is provided by the owner/operator of the offshore oilfield upon which the services are being provided and, in turn, the extent to which the owner/operator's insurance will respond to cover the liability assumed by the owner/operator under such contractual pollution indemnity (refer to section 4(b) above).

## 5.2 Operator's Extra Expense (OEE) and Pollution Insurance – Standard Terms of Cover

Operator's Extra Expense, or OEE, insurance is intended to provide cover for the potential pollution liability of the owner/operator of offshore oilfields. OEE insurance typically includes coverage for costs and expenses incurred in:

1. Controlling a well which is out of control;
2. Re-drilling or restoring a well which is lost or damaged by blowout; or
3. Seepage and pollution from the well in connection with a blowout.<sup>132</sup>

Specific additional coverage is available by policy endorsements, including contractual liability for third party equipment in the 'care, custody and control' of the owner/operator.<sup>133</sup>

OEE insurance is placed with limits and deductibles applicable to a 100% license interest and then scaled back to reflect the respective assureds' working interest in the field license. As a result, in circumstances where there are a number of joint venture participants involved in the field, each with its own OEE with specific limits and deductibles, the overall amount of insurance cover available for any pollution damage will not be immediately apparent because this is a function of the proportionate amount of insurance that each participant has placed.<sup>134</sup>

---

<sup>130</sup> See, for example, Standard Club Offshore Rules 2011/2012, rule 5.9(2), Gard Rules 2011, rule 35.

<sup>131</sup> See, for example, Standard Club Offshore Rules 2011/2012, rule 5.11(2), Gard Rules 2011, rule 31.

<sup>132</sup> International Risk Management Institute, Inc. (IRMI), *Operators Extra Expense (OEE)* (2011) <<http://www.irmi.com/online/insurance-glossary/terms/o/operators-extra-expense-oe.aspx>> at 2 July 2011.

<sup>133</sup> *Ibid.*

<sup>134</sup> Jan-Hugo Marthinsen, 'Presentation' (Speech delivered at the Market Presentation of Deep Horizon Insurance Arrangements, Zurich, 27 September 2010).

Significantly, although there are common terms typical utilised in OEE policies, there are several renditions of OEE policy wording in the market and there is no industry-standard policy wording for OEE coverage.<sup>135</sup> Specific OEE policy terms continue to be a function of placement negotiations between insurer and insured on a case by case basis. As a result, whether or not a specific policy will provide coverage in response to any particular pollution incident is unable to be determined with certainty without scrutinizing the actual terms of the policy and, ultimately, unable to be tested unless and until there is an actual incident. Given the importance of the issue and the stakes involved, this is obviously far from ideal.

Owners/operators may also have in place third party liability policies that may include coverage for pollution liability. However, it is not uncommon for such policies to exclude cover for any liability in connection with pollution control and cleanup costs.<sup>136</sup>

### 5.3 Typical Levels of Insurance Cover for Pollution

Information and data regarding the amounts of cover available for pollution damage is not openly available and difficult to access. Cover is typically based on a per project basis and on terms that are confidential to each of the insurer and the insured parties. As a result, it is difficult to ascertain what or how much insurance may actually be available to respond to any pollution incident involving offshore oil facilities.

Discussions with experienced offshore oilfield insurance industry specialist brokers establishes that:

1. The amounts of pollution cover placed by oil industry participants are, generally:
  - a. oil companies: USD 500 million to USD 1 billion (although this can often be ‘self-insured’ i.e. no insurance is actually placed with a third party insurer);
  - b. drill rig contractors: USD 300 million to USD 1 billion; and
  - c. other oilfield service providers: USD 50m to USD 1 billion,

but
2. There are significant regional variances in the levels of insurance cover placed for pollution damage, particularly within the jurisdictions of developing countries.<sup>137</sup>

The foregoing highlights the fundamental problem with the present lack of a clear regime or framework governing the placement of insurance required for marine oil pollution from offshore facilities. There is a troubling lack of transparency when it comes to assessing what amounts of insurance may be in place for any pollution incidents, let alone whether any such insurance is likely to be adequate. As a result, accountability for the adequacy of insurance arrangements that exist on a particular project is unable to be assessed unless and until an incident occurs to test such adequacy. Again, given the stakes involved, this is clearly an unsatisfactory situation.

### 6.0 The Sufficiency and Adequacy of the Current Liability Regimes and State Responsibility for Unrecovered Losses or Damages arising from Marine Pollution from Offshore Facilities

The sufficiency and adequacy of the current marine oil pollution liability regime within these regional legislative frameworks and potential State responsibility will now be considered as a function of:

1. The value of claims typically arising from pollution caused by offshore units, focusing in particular on the anticipated claims arising from the recent Macondo and Montara incidents;

---

<sup>135</sup> Sam Salvato and Larry Flak, *Part Three – Insurance: For the assured to be prepared for the emergency and be adequately covered, correct policy wording on Control-of-well coverage under OEE or EED 8/86 forms needs to be worked out in advance* John Wright Co. <<http://www.jwco.com/technical-literature/p03.htm#Introduction>> at 2 July 2011.

<sup>136</sup> Jan-Hugo Marthinsen, ‘Presentation’ (Speech delivered at the Market Presentation of Deep Horizon Insurance Arrangements, Zurich, 27 September 2010).

<sup>137</sup> Email from Tom Helleboe, Director of Oriental Special Risks Services, Market Overview, to Shane Bosma, 31 January 2011.

2. The difficulties associated with pursuing claims and successfully establishing liability in connection with pollution arising from offshore units; and
3. The likely availability and adequacy of insurance coverage for claims arising from pollution caused by offshore units.

## 7.0 The Adequacy of the Current Regime for the Recovery of Losses arising from Marine Oil Pollution arising from Offshore Oil Facilities

The Macondo incident has given rise to in excess of USD40 billion in claims to-date for costs and losses arising from the pollution caused by this incident with the full extent of the damages arising from this incident yet to be fully understood or determined. In a sense, the community is fortunate that this incident occurred within the jurisdiction of the US and the application of the US *OPA 1990* because, with the exception of the voluntary *OPOL* regime that applies in the EU, relative to the complete non-existence of any such regimes in other parts of the world the US *OPA 1990* does at least provide a regime that is responsive to such incidents.

Even so, the regime under the US *OPA 1990* is clearly inadequate to cater for the enormity of the exposures associated with marine pollution incidents from offshore oil facilities.

For example, to help put the oil spill financial responsibility (OSFR) coverage applicable under the US *OPA 1990* into context, as a 'new well' the Macondo well required OSFR coverage of USD35 million to be in place during the drilling phase. As it has transpired, it is estimated that the Macondo well blowout resulted in a total of 4.9 million barrels of oil being spilt to the environment at an estimated average rate of 53 000 barrels per day, causing in excess of USD40 billion in loss and damage.<sup>138</sup> Clearly, the OSFR coverage, the USD75 million liability limitation, and the USD1 billion oil fund that apply under *OPA 1990* are patently inadequate to cover this exposure.

As a result, the determination of liability for pollution damage is left to the laws and the courts of the applicable coastal State and is therefore a function of the factual circumstances of the incident, the contractual arrangements that may be in place, and the outcome of complex and expensive litigious action that typically takes several years to be resolved.

For example, the various contractors involved in the Macondo incident are seeking to rely upon the benefit of the industry-standard indemnities from the operator, BP, in response to the various claims arising from the incident and made against them by third parties and BP itself.<sup>139</sup> BP has commenced formal proceedings against each of Transocean (the drill rig contractor and operator), Halliburton (the well services contract providing cementing services), and Cameron International (the provider of the blow-out provider), alleging that each of these contractors were negligent or breached the performance requirements of their respective contracts. Each of the contractors have claimed the benefit of the contractual indemnity in their defences of the BP claims, Transocean going so far to say that the BP claims are 'specious and unconscionable' as a result.<sup>140</sup>

At the joint operating level, further complications in determining or apportioning liability between JV participants arise where the operator's 'willful misconduct' may be and is typically excluded from the indemnity protection otherwise afforded to the operator under the joint operating agreement. Some joint operating agreements, such as the joint operating agreement applicable to the licence of the subject of the Macondo well, also exclude liability arising from the operator's 'gross negligence'.<sup>141</sup> Each of these exclusions are specifically defined concepts within the applicable joint operating agreement and, as is the case with Anadarko's refusal to accept its proportionate share of liability and instead sue BP for over USD272 million in clean-up costs relating to the disaster because of what it alleges has arisen due to BP's 'gross negligence', whether any particular

---

<sup>138</sup> Campbell Robertson and Clifford Krauss, *The New York Times* (online), 2 August 2010 <[http://www.nytimes.com/2010/08/03/us/03spill.html?\\_r=1&fta=y](http://www.nytimes.com/2010/08/03/us/03spill.html?_r=1&fta=y)>.

<sup>139</sup> *Re: Oil Spill by the Oil Rig Deepwater Horizon in the Gulf of Mexico on April 20, 2010* MDL-2179, (US District Court, Eastern District of Louisiana (New Orleans), 2010) cited in Karen Gullo, 'Transocean Blamed in BP Suit for Billions in Damages on Spill Anniversary' *Bloomberg* (online), 22 April 2011 <<http://www.bloomberg.com/news/2011-04-21/bp-sues-transocean-seeking-to-recover-billions-in-damages-for-gulf-spill.html>>.

<sup>140</sup> Gullo, above n 139.

<sup>141</sup> Easo, above n 65, 21; AIPN Standard JOA cl 4.7(C).

factual circumstances fall within the applicable contractual definition is often fraught with uncertainty and beset with legal disputation.<sup>142</sup>

The patent inadequacy of the current regional regulatory liability regimes is compounded by the lack of accountability and visibility in relation to the insurance cover available for offshore pollution incidents. As identified by the Montara Commission of Enquiry, in order to embody the 'polluter pays' principle, regulatory authorities need to be satisfied that companies have adequate insurance to meet their obligations and to ensure companies have financial capacity to properly respond to such incidents.<sup>143</sup>

A disturbing reality of the present regulatory regimes is that it is difficult, if not impossible to determine with certainty whether or not there may be specific policies that will provide coverage in any particular pollution incident without scrutinizing the actual terms of the available policies which have been negotiated by, and remain confidential to the parties to each of the policies. The result is that the extent of available cover is unable to be assessed in practice unless and until there is an actual incident. Given the enormity of the exposures involved, this this is an unsatisfactory position from any perspective.

For example, in relation to the Macondo well blow-out, the insurance arrangements of the various parties involved only became publically available as part of the enquiry that followed the incident. Those arrangements are broadly as follows:<sup>144</sup>

1. Insurance held by license holders:
  - a. BP (25% interest holder) self-insures through its own captive insurance company, Jupiter Insurance Ltd. Jupiter is reported to have an underwriting limit of USD700 million and does not buy reinsurance. In other words, any insurance cover that might be needed is taken on BP's own balance sheet.
  - b. Anadarko (25% interest holder) has:
    - i. Operators Extra Expenses (OEE) insurance with a limit of USD250million for 100%, equating to USD62.5 million for its 25% interest; and
    - ii. Third Party Liability (TPL) insurance with a limit of USD150 million.
  - c. Mitsui Oil Exploration Offshore (10% interest holder) has:
    - i. OEE insurance with a limit of USD300 million for 100%, equating to USD 30 million for its 10% interest; and
    - ii. TPL insurance with a limit of USD150 million.
2. Insurance arrangements of the contractors involved:
  - a. Transocean (the drill rig owner and operator) has:
    - i. Hull insurance for the *Deepwater Horizon* drilling rig with agreed insurance value of USD560 million. This covers the loss of the rig itself and does not respond to any pollution liability or liability for third party claims.
    - ii. Casualty Insurance programme covering up to USD1 billion, USD50 million of which is self-insured by Transocean. This insurance has five layers of cover constituted by 2 x USD150 million, 2 x USD200 million and 1x USD250 million limits. This cover is placed with insurers in London, the United States and Bermuda.
    - iii. Separate US Workers Compensation insurance for statutory limits.

---

<sup>142</sup> Business Desk, above n 121.

<sup>143</sup> Montara Commission of Inquiry, *Report of the Montara Commission of Inquiry*, (2010), 370, 373.

<sup>144</sup> Jan-Hugo Marthinsen, 'Presentation' (Speech delivered at the Market Presentation of Deep Horizon Insurance Arrangements, Zurich, 27 September 2010).

- iv. Contingent OEE insurance with USD150 million limit in the event Transocean becomes contractually liable to pay for the costs or claims arising from the pollution.
- b. Halliburton (well services contractor) has TPL insurance up to USD600 million.
- c. Cameron Iron Works (blow-out preventer supplier) has TPL insurance up to USD500 million.

Even once the availability and levels of insurance cover are understood, a (very) disturbing fact is that the industry-standard terms of contractors' P&I liability insurance exclude from cover any liability for well- or reservoir-related oil pollution. This then means that the balance sheet strength of the contractor becomes critical unless the industry-standard contractual indemnity from the operator for such pollution is in place and can be enforced. Even if this (substantial) hurdle is overcome, the terms and amounts of cover under the operator's and its JV partners' OEE insurance remains to be determined.

Except to the extent minimum requirements are prescribed under the licence or by law (and such requirements are currently only required under the US *OPA 1990* and the EU legislation that incorporates the *OPOL* limits – refer to section 4 above), the actual insurance arrangements that may be in place at the JV level and available to respond to any pollution incident on any particular offshore operation is typically bespoke to the arrangements in place under the applicable joint operating agreement as may be determined in the exercise of the operating committee's discretion. As a result, absent an audit conducted by the relevant governing authority, the adequacy of any insurance to respond to any pollution incident cannot be tested unless and until there is an actual incident. With the inescapable knowledge of the enormity of the exposures that are involved following the Macondo and Montara incidents, it is difficult to see how this state of affairs could be considered to be in any way acceptable.

Ultimately, if there is inadequate insurance in place and insufficient balance sheet strength or corporate unwillingness to assume responsibility for the pollution incident, then insolvency is the usual outcome. Insolvency can truncate the responsibility of polluters and thereby introduce the possibility of externalized social costs with such externalization disincentivising potential polluters to take precautions against risk.<sup>145</sup> By way of example, even with the financial responsibility provisions imposed under the US *OPA 1990*, a significant fraction of oil spill damages go uncollected due to bankruptcy or dissolution, with more than 17% of payments from the *Oil Spill Liability Trust Fund* between 1990 and 2002 being unrecoverable.<sup>146</sup>

Again, the community is in a sense fortunate that BP was the operator with responsibility for the Macondo incident and was able to bring to bear the balance sheet strength of, at the time, the world's second largest public multinational oil company and a corporate culture willing to assume initial responsibility beyond the legislative limitation and despite the disputation with its JV partners and contractors. However, the current 'Russian roulette' of being reliant upon the balance sheet strength of the polluter is clearly unsatisfactory and it is difficult to conclude that the present state of affairs can be considered sufficient to fulfill the international legal obligation of coastal States to establish adequate compensation for damage caused by pollution to the marine environment.

## 7.1 The Exposure of States for the Current Inadequacy of the Civil Liability Regime Applicable to Marine Oil Pollution from Offshore Oil Facilities

The following key points can be distilled from the overview in section 2 above in relation to the responsibility of States for oil pollution caused by offshore oil and gas facilities:

1. As a matter of customary international law, a State is obliged to exercise due diligence to ensure that activities carried out in the marine environment within the State's jurisdiction do not cause extra-territorial harm to the rights/interests of other States,<sup>147</sup> with the applicable test being what amount of control *ought to have been exercised* by the State in the particular circumstances, not the amount of actual control.<sup>148</sup>

---

<sup>145</sup> Boyd, above n 74, 157.

<sup>146</sup> Ibid 160.

<sup>147</sup> Brownlie, above n 13, 455; *The Trail Smelter Case* (1962) 3 RIAA 1905, 1965; *Declaration of the United Nations Conference on the Environment (Stockholm Declaration)*, 1972, 824 UNTS 216, Principle 21. Instances of State practice provide further evidence of the existence of such an obligation - refer Smith, above n 10.

<sup>148</sup> Brownlie, above n 13, 453.

2. There is an emergent principle of international law of strict State liability for harm caused by abnormally dangerous activities<sup>149</sup> and an activity may be considered abnormally dangerous where either the probability or magnitude of harm is substantial.<sup>150</sup>
3. Human rights and environmental unity may be relied upon by a State to prove an international interest in order to establish standing in relation to marine pollution occurring solely within the jurisdiction of another State based on a right *action popularis*<sup>151</sup> or as an obligation *erga omnes*.<sup>152</sup>
4. Pursuant to the *United Nations Convention on the Law of the Sea 1982 (UNCLOS)*, States are:
  - a. authorised to construct offshore installations on the continental shelf and in the exclusive economic zone (EEZ) of the State and to exercise jurisdiction over these installations;<sup>153</sup> and
  - b. required to take steps to minimize marine pollution from offshore installations,<sup>154</sup> make efforts to implement national laws and standards regulating seabed activities,<sup>155</sup> cooperate globally and regionally in formulating international rules and standards for the protection of the marine environment,<sup>156</sup> enforce effective international standards,<sup>157</sup> and establish adequate compensation for damage caused by pollution to the marine environment.<sup>158</sup>
5. In relation to the regulation of marine pollution from offshore installations:
  - a. there is a limited number of legal provisions that can be found in international conventions dealing with pollution from offshore installations;<sup>159</sup>

---

<sup>149</sup> See for example the following treaties:

1. The strict, but limited, liability and compulsory liability insurance scheme system that applies to oil tankers under the 1992 *Civil Liability and Fund Conventions* constituted by: the *International Convention Relating to Civil Liability for Oil Pollution Damage 1969*, 1969, 973 UNTS 3, (entered into force 19 June 1975) as amended in 1992 by the *Protocol to Amend the International Convention Relating to Civil Liability for Oil Pollution Damage 1969*, 1992, UKTS 1996 No 87, (entered into force 30 May 1996) and a *2000 Agreement to Increase Limits*, 2000 (entered into force 1 November 2003); and the *1971 Convention on the Establishment of an International Fund for Compensation of Oil Pollution Damage*, 1969, 11 ILM 284, (entered into force 16 October 1978), as amended in 1992 by the *Protocol to Amend the International Convention Relating to Civil Liability for Oil Pollution Damage 1969*, 1992, UKTS 1996 No 87, (entered into force 30 May 1996) and a *2000 Agreement to Increase Limits*, 2000 (entered into force 1 November 2003), and further amended in 2003 by the *Protocol to Apply a Third Supplementary Fund*, 2003, (entered into force 3 March 2005).
2. *International Convention for the Unification of Certain Rules Relating to Damage Caused by Aircraft to Third Parties on the Surface*, 1933, US Dept. of State, 1 Foreign Relations of the US, 1933, at 968-77; *Convention on Damage Caused by Foreign Aircraft to Third Parties on the Surface*, 310 UNTS 1811952, art 1.
3. *Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies*, 1967, 3 UST 2410, article VII; *Convention on Liability for Damage Caused by Objects Launched into Outer Space*, 1972, 10 ILM 965, art II; and
4. *Vienna Convention on Civil Liability for Nuclear Damage*, 1963, 2 ILM 727, art IV(1); *Convention on the Liability of Operators of Nuclear Ships*, 1962, 57 Am. J. Int'l L. 268, art II(1).

Evidence of such a principle can also be found in the practice of many States through the adoption of appropriate domestic legislation, see for e.g. American Law Institute *Restatement (Second) of Torts*, s 519; see *Russian Civil Code* (Russian Federation), s 454. This expresses strict liability for activities attendant with 'increased danger'. See *Code civil* [Civil Code] (France), art 1384. This provides for strict liability. The principle has also been advocated by a number of eminent writers - refer to Kelson, above n 40; Handl, above n 40; Jenks, above n 40.<sup>150</sup> Kelson, above n 40, 228.

<sup>151</sup> 'Right resident in a member of a community to take legal action in the vindication of a public interest'. Note that recognition of such a right remains unsettled at international law. Such a right has been affirmed in *South West Africa Case* (First Phase) [1962] ICJR 319, 388 (Jessup J); *Barcelona Traction Case* (1970) ICJR I, 21; *Nuclear Tests Case (Judgement)* (1974) ICJR 253, 324-5.

<sup>152</sup> 'toward all', 'in relation to everyone'; see *Barcelona Traction Case* (1970) ICJR I at 21 where the ICJ stated that: 'an essential distinction should be drawn between the obligations of a State towards the international community as a whole, and those arising vis-a-vis another State ... By their very nature the former are the concern of all States. In view of the importance of the rights involved, all States can be held to have a legal interest in their protection they are obligations *erga omnes*.'

<sup>153</sup> *United Nations Convention of the Law of the Sea (UNCLOS)*, 1982, 1833 UNTS 3 arts 60, 80.

<sup>154</sup> *Ibid* art 194.

<sup>155</sup> *Ibid* art 208.

<sup>156</sup> *Ibid* art 197.

<sup>157</sup> *Ibid* arts 214, 215.

<sup>158</sup> *Ibid* art 235(2). Further, in relation to vessels registered with a State, art 94(1) of *UNCLOS* provides that a flag-State must 'effectively exercise its jurisdiction and control in administrative, technical and social matters over ships flying its flag'. This is a direct reproduction of art 5(1) of the *Geneva Convention on the High Seas*, 1958, 450 UNTS 82, the preamble to which provides 'The States Parties to this Convention desire to codify the rules of international law...'. The duty is therefore an aspect of customary international law.

<sup>159</sup> Kashubsky, above n 14, 3.

- b. attempts to create an international legal document covering marine pollution and other important aspects relating to offshore units and their operation have been unsuccessful,<sup>160</sup> and
- c. attempts to implement the same regime of a strict, but limited, liability and compulsory liability insurance scheme to offshore installations<sup>161</sup> as currently applies to oil tankers<sup>162</sup> have failed.

The use of civil liability treaties as the preferred vehicle for the development of laws in this area evidences what Mason and Noussia refer to as the changing spatiality of environmental liability and a move towards a compensation regime driven by private actors rather than State authority.<sup>163</sup> Accordingly, in the absence of such a regime that adequately responds to marine pollution from offshore oil facilities, coastal States carry concurrent or subsidiary liability for losses and damage arising from such marine pollution<sup>164</sup> and are exposed to claims to the extent such losses and damages are unrecovered or unrecoverable due to the inadequacy of the current civil liability regimes.

## 7.2 The Question of Damage and the Issue of Locus Standi

It is generally acknowledged that international law will only impinge on the sovereignty of a State's activities within its jurisdiction when the interests of other States are implicated.<sup>165</sup> If damage to such interests were to occur, the injured State would have standing in accord with the principle *sic utere tuo ut alienum non laedas*.<sup>166</sup>

This is particularly relevant to any act creating marine pollution that occurs within a State's EEZ because the territorial interests of other States may not have been prima facie infringed. However, there are a number of grounds upon which a State may claim it has standing even if it has not suffered actual damage.

- i. Under international law, according to the principle *pacta sunt servanda*<sup>167</sup> a breach of a treaty obligation gives other contracting States a good cause of action.
- ii. Another State may seek standing based on its interest to the maximum sustainable yield of fishery resources within the EEZ of a coastal State that is surplus to the coastal State's capacity to harvest.<sup>168</sup>
- iii. Protection of the environment has been specifically identified as a primary and fundamental human right.<sup>169</sup> Further, premised on the 'unity' of the global environment, it is not only the State with

<sup>160</sup> See Kashubsky, above n 14, 5-6; White, above n 45, 26.

<sup>161</sup> *Convention on Civil Liability for Oil Pollution Damage resulting from Exploration for and Exploitation of Seabed Mineral Resources 1977 (Convention on Civil Liability for Oil Pollution Damage)*, 1977, 16 ILM 1451 (not yet in force).

<sup>162</sup> Constituted by the *International Convention Relating to Civil Liability for Oil Pollution Damage 1969*, 1969, 973 UNTS 3 (entered into force 19 June 1975) as amended in 1992 by the *Protocol to Amend the International Convention Relating to Civil Liability for Oil Pollution Damage 1969*, 1992, UKTS 1996 No 87 (entered into force 30 May 1996) and a *2000 Agreement to Increase Limits*, adopted 18 October 2000 (entered into force 1 November 2003); and the *1971 Convention on the Establishment of an International Fund for Compensation of Oil Pollution Damage*, 1969, 11 ILM 284 (entered into force 16 October 1978), as amended in 1992 by the *Protocol to Amend the International Convention Relating to Civil Liability for Oil Pollution Damage 1969*, 1992, UKTS 1996 No 87 (entered into force 30 May 1996) and a *2000 Agreement to Increase Limits*, 2000 (entered into force 1 November 2003), and further amended in 2003 by the *Protocol to Apply a Third Supplementary Fund*, 2003 (entered into force 3 March 2005).

<sup>163</sup> Michael Mason, 'Transnational Compensation for Oil Pollution Damage: Examining Changing Spatialities of Environmental Liability' (2002) LSE Research Papers in Environmental and Spatial Analysis (RPESA), London School of Economics and Political Science, 20; Noussia, above n 76, 2-3.

<sup>164</sup> Gunther Handl, 'State Liability for Accidental Transnational Environmental Damage by Private Persons', (1980) 74 *American Journal of International Law* 525, 560-564.

<sup>165</sup> Brownlie, above n 13, 436.

<sup>166</sup> 'Use your own property in such a manner as not to injure that of another' cf *Trail Smelter Case*, 3 RIAA 1905 (1940); *Stockholm Declaration*; *Corfu Channel Case* (1940) ICJR 4, Principle 21.

<sup>167</sup> 'Agreements (and stipulations) of the parties (to a contract) must be observed.'

<sup>168</sup> *United Nations Convention on the Law of the Sea (UNCLOS)*, 1982, 1833 UNTS 3, arts 62(2), 69, 72.

<sup>169</sup> For example, the *Stockholm Declaration* declares that: 'Man has the fundamental right to freedom, equality and adequate conditions of life, in an environment of a quality which permits a life of dignity and well-being...'. The *1948 Universal Declaration of Human Rights* also propounds the basic 'right to health'; *Universal Declaration of Human Rights*, 1948, 999 UNTS 302, art 25. The *Universal Declaration* was voted in unanimously by the General Assembly. Similarly, art 12 of the *International Covenant on Economic, Social and Cultural Rights* defines improvement of environmental hygiene as one of the essential steps to secure the individual's right to 'the highest attainable standard of physical and mental health': *International Covenant on Economic, Social and Cultural Rights*, 1966, 993 UNTS 3, art 12(2)(b). Freedom from environmental degradation and injury has also been identified by certain commentators as a protected human right: see Smith, above 10, 105-7, citing Ingrid Delupis, *International Law and the Independent State* (2<sup>nd</sup> ed, 1987); Hersch Lauterpacht, *International Law and*

authority to exploit territorial resources which possesses an interest in their protection; all States have a concern that the ‘heritage’ of global natural resources does not suffer injury.<sup>170</sup>

As such, human rights and environmental unity may be relied upon by a State to prove an international interest in order to establish standing based on a right *actio popularis*<sup>171</sup> or as an obligation *erga omnes*.<sup>172</sup>

Accordingly, coastal States are exposed to legitimate claims for losses and damages arising from marine pollution arising from offshore oil facilities operating within the jurisdiction of the coastal State, particularly to the extent such losses and damages remain unrecovered or unrecoverable due to the current inadequacy of the civil liability regime applicable to such pollution. It is in this context that an alternative regulatory regime covering marine pollution from offshore oil facilities will now be considered.

## 8.0 An Alternative Regime for the Regulation of Marine Pollution from Offshore Oil Facilities

An alternative regime for the regulation of marine pollution from offshore installations will be explored toward the end of both to minimise the risk of incidents and, if incidents do occur, to optimise the recoverability of claims in terms of establishing liability for claims and ensuring sufficient financial capacity is available to meet claims.

### 8.1 The Civil Liability Regime as a Legal Norm for Marine Oil Pollution

The civil liability regime as it applies under the 1992 *Civil Liability and Fund Conventions*<sup>173</sup> to ship-sourced oil pollution has been recognized as being at the forefront of establishing a legal norm for marine pollution compensation, advancing private law remedies to enable victims of oil spillage to recover financial recompense on a strict liability basis from the liability insurers of ship owners.<sup>174</sup> The method of compensation under this regime – strict liability (without the need to prove negligence) up to a maximum limit backed by compulsory

---

*Human Rights* (1<sup>st</sup> ed, 1950); Moses Moskowitz, *The Politics and Dynamics of Human Rights* (1<sup>st</sup> ed, 1968); Myres McDougal, Harold Lasswell and Lung-chu Chen, *Human Rights and World Public Order* (1<sup>st</sup> ed, 1980); Gregory Ho, ‘UN Recognition of the Human Right to Environmental Protection’ (1976) 2 *Earth Law Journal* 225; Pierre-Marie Dupuy, *Le Droit a la sante et la protection de l’environnement* (1978), cited by Smith, above n 10; OECD Secretariat, ‘Observations on the Concept of International Responsibility of States in Relation to the Protection of the Environment’ in OECD (eds), *Legal Aspects of Transfrontier Pollution* (Washington, OECD Publications Centre, 1977) 388, at 389-90; Lyman Heine, *The Attitudes of the Asian-African States toward the Laws of State Responsibility* (1<sup>st</sup> ed 1970), 294-95; Van Lier, *Acid Rain and International Law* (2<sup>nd</sup> ed, 1981), 134-37, cited in Smith, above n 10.

<sup>170</sup> Gunther Handl, ‘Territorial Sovereignty and the problem of transnational pollution’ (1976) 69 *American Journal of International Law* 50: It is nowadays accepted as an undeniable fact that the earth’s biosphere represents a single indivisible system characterized by the inter-relation of its various functional and ecological subsystems, the disruption of any of which promotes the breakdown and destabilization of another.

The *Stockholm Declaration* is illustrative of this concept:

Principle 1: Man...bears a solemn responsibility to protect and improve the environment for present and future generations.

Principle 2: The natural resources of the earth including the air, water, land, flora and fauna and especially representative samples of natural ecosystems must be safeguarded for the benefit of present and future generations.

Principle 3: The non-renewable resources of the earth must be employed in such a way as to guard against the danger of their future exhaustion and to ensure that benefits from such employment are shared by all mankind.

*UN Stockholm Declaration on the Human Environment*, 1972, 993 UNTS 3; cf also *Convention for the Protection of the World Cultural and Natural Heritage*, 1972, 1037 UNTS 151.

<sup>171</sup> Please refer to footnote 151.

<sup>172</sup> Please refer to footnote 152.<sup>173</sup> Constituted by the *International Convention Relating to Civil Liability for Oil Pollution Damage 1969*, 1969, 973 UNTS 3 (entered into force 19 June 1975) as amended in 1992 by the *Protocol to Amend the International Convention Relating to Civil Liability for Oil Pollution Damage 1969*, 1992, UKTS 1996 No 87 (entered into force 30 May 1996) and a *2000 Agreement to Increase Limits*, adopted 18 October 2000 (entered into force 1 November 2003); and the *1971 Convention on the Establishment of an International Fund for Compensation of Oil Pollution Damage*, 1969, 11 ILM 284 (entered into force 16 October 1978), as amended in 1992 by the *Protocol to Amend the International Convention Relating to Civil Liability for Oil Pollution Damage 1969*, 1992, UKTS 1996 No 87 (entered into force 30 May 1996) and a *2000 Agreement to Increase Limits*, 2000 (entered into force 1 November 2003), and further amended in 2003 by the *Protocol to Apply a Third Supplementary Fund*, 2003 (entered into force 3 March 2005).

<sup>173</sup> Constituted by the *International Convention Relating to Civil Liability for Oil Pollution Damage 1969*, 1969, 973 UNTS 3 (entered into force 19 June 1975) as amended in 1992 by the *Protocol to Amend the International Convention Relating to Civil Liability for Oil Pollution Damage 1969*, 1992, UKTS 1996 No 87 (entered into force 30 May 1996) and a *2000 Agreement to Increase Limits*, adopted 18 October 2000 (entered into force 1 November 2003); and the *1971 Convention on the Establishment of an International Fund for Compensation of Oil Pollution Damage*, 1969, 11 ILM 284 (entered into force 16 October 1978), as amended in 1992 by the *Protocol to Amend the International Convention Relating to Civil Liability for Oil Pollution Damage 1969*, 1992, UKTS 1996 No 87 (entered into force 30 May 1996) and a *2000 Agreement to Increase Limits*, 2000 (entered into force 1 November 2003), and further amended in 2003 by the *Protocol to Apply a Third Supplementary Fund*, 2003 (entered into force 3 March 2005).

<sup>174</sup> Mason, above n 163, 20; Noussia, above n 76, 1-3.

insurance – has been widely acknowledged as an effective and equitable means of incorporating the ‘polluter pays’ principle into the field of marine environmental liability.<sup>175</sup>

Civil liability regimes such as the *1992 Civil Liability and Fund Conventions* compulsorily oblige the responsible parties (i.e. the shipowner in the context of the *1992 Civil Liability and Fund Conventions*) to maintain insurance to cover its liability and enable victims to seek recourse directly against the insurer.<sup>176</sup> As such, civil liability regimes enhance the utility of the management of risk since the larger risk of oil pollution damage compensation is removed from the insured by the payment of a relatively small premium and the transaction cost is reduced as it is already decided *ex ante* through the conditions of the insurer who should intervene and bear the costs when an incident occurs.<sup>177</sup>

However, the adoption of a strict liability rule for oil pollution damage is not without its critics.

Adopting an economic analysis of the law, Faure & Hui (2006) note that there is a direct linear relationship between the magnitude of the accident risk and the amount spent on care by the potential polluter and criticize the orthodox rationale favouring a limited strict liability rule for oil pollution damage that only a strict liability rule would lead to full internalization of the costs involved of these highly risky activities.<sup>178</sup> According to Faure & Hui (2006), a potential polluter will only take care to avoid the occurrence of accidents with a magnitude of claims equal to the limitation amount and will not take the care necessary to reduce the total accident costs leading to the problem of under deterrence. This is because the cost of the amount of care needed to reduce the total accident risk efficiently will be higher than the amount the potential polluter will spend to avoid an accident with claims equal to the statutorily limited amount.<sup>179</sup>

Faure & Hui (2006) argue that a negligence based financial limitation is more effective than a strict liability based limitation because under a negligence rule, the polluter will have an incentive to avoid negligence as long as the costs of taking due care are lower than the financial limitation, whereas strict liability always leads to under deterrence as soon as the expected loss is larger than the amount of the financial limit.<sup>180</sup>

Faure & Hui (2006) also criticize the usual argument, advanced in the context of compulsory insurance, that a statutory limit is a necessary tool to guarantee the insurability of risks. They point out the ‘clear alternative’ of introducing a duty to insure up to the available amount of insurance coverage on the market, but to keep the liability of the potential polluter unlimited. This, they say, would have the advantage of keeping the duty to insure at a realistic level but also retain the benefit of incentivizing the polluter to take care to avoid the risk where the magnitude of harm is higher than the insured amount.<sup>181</sup> Faure & Hui also point to recent examples where such a duty to insure has been adopted in relation to the nuclear liability conventions by Austria, Germany, Japan, Switzerland and Sweden.<sup>182</sup>

Faure & Hui (2006) do, however, recognize the so-called problem of ‘judgement proof’ where polluters might in any event face insolvency if they must pay an amount of damages exceeding their individual assets which therefore incentivizes potential polluters only to purchase liability insurance up to the amount of his assets. With this in mind, Faure & Hui agree with the argument that, in these circumstances, compulsory insurance might provide an optimal outcome because insurers will seek to impose controls on the conduct of the insured as conditions of the insurance cover and compulsory insurance will lead to more certain victim compensation.<sup>183</sup> Similarly, Boyd (2006) observes that financial responsibility rules, in combination with liability law, foster the internalization of social costs by polluters by ensuring that firms possess the resources needed to compensate society for environmental costs.<sup>184</sup>

---

<sup>175</sup> Mason, above, n 163, 3, quoting Gotthard Gauci, *Oil Pollution at Sea: Civil Liability and Compensation for Damage* (1<sup>st</sup> ed, 1997) 18-20; Gotthard Gauci, ‘Protection of the marine environment through the international ship-source oil pollution compensation regimes’ (1999) 1 *Review of European Community and International Environmental Law* 8, 29-36.

<sup>176</sup> Faure and Hui, above n 97, 319-320.

<sup>177</sup> *Ibid* 320.

<sup>178</sup> *Ibid* 333.

<sup>179</sup> *Ibid* 333.

<sup>180</sup> *Ibid* 334.

<sup>181</sup> *Ibid* 335-336.

<sup>182</sup> *Ibid* 336.

<sup>183</sup> *Ibid* 338-339.

<sup>184</sup> Boyd, above n 74, 157; see also J Wagner and K Armstrong, ‘Managing environmental and social risks in international oil and gas projects: Perspectives on compliance’, (2010) 3(2) *Journal of World Energy Law and Business* 140, 163.

Further, and importantly, a strict liability standard will generally be less expensive to enforce, as a negligence standard requires additional resources to determine the cause of the spill (and perhaps to litigate over the cause), and avoids the disincentive of a negligence standard resulting in a lower expected penalty to facility operators since they are not held liable for pure accidents.<sup>185</sup>

Taking the above into consideration, the present writer agrees with the widely considered view that the combination of the *Civil Liability* and *Fund Conventions* is an effective mechanism to achieve a sharing of costs of oil pollution damage between vessel owners and the oil industry<sup>186</sup> and, with the inescapable knowledge of the enormity of the risks involved following the Macondo and Montara incidents, it is almost self-evident that such a mechanism needs to be urgently adopted at an international level in relation to marine pollution from offshore oil facilities. This is especially so given that the means already exist to quickly adopt such a mechanism. The dormant *Draft Offshore Units Convention 2001*<sup>187</sup> and the *Convention on Civil Liability for Oil Pollution Damage resulting from Exploration for and Exploitation of Seabed Mineral Resources 1977*<sup>188</sup> already exist and can be readily ratified and implemented with the necessary political will at the international level.

The setting of the optimal level of insurance, however, remains a critical issue and the evolution of the international regime for marine pollution from tankers has evidenced a consistent pattern of increasing limits in reaction to each new major incident.<sup>189</sup> Most recently, in 2000 the IMO Legal Committee passed resolutions increasing the limits of the *1992 Civil Liability* and *Fund Conventions* and in May 2003 a new protocol was accepted during a diplomatic conference in London introducing a supplementary fund to the *1992 Fund Convention* increasing the total amount of compensation for oil pollution damage to USD 1 billion.<sup>190</sup> However, with capacity in the offshore upstream energy insurance market at a reported all-time record level of USD4.3 billion<sup>191</sup>, the same level as currently applies under the *1992 Fund Convention* of USD1 billion would be eminently sustainable and appropriate.

That being said, two intrinsic problems that have been identified with the international regime under the *Civil Liability* and *Fund Conventions* remain to be addressed, firstly, the refusal of the Fund to cover environmental damages (more particularly ecological restoration) and, secondly, the lack of effective sanctions to the pollution prevention system.<sup>192</sup>

## 8.2 Compensation for Environmental Damages

The liability for natural resource damage (NRDs) and the financial responsibility requirements imposed under *OPA 1990* have been identified as the two most distinctive elements of US maritime pollution law that are most worthy of emulation by other countries.<sup>193</sup> According to Boyd (2006), the imposition of liability for NRDs is an important innovation that addresses a global need, restoration of damaged ecological services and acknowledgement that natural resources have significant real economic value that needs to be included in the calculus of damages,<sup>194</sup> and governments concerned with deterring and compensating for these real losses can look to the US NRD experience as a successful first step.<sup>195</sup>

---

<sup>185</sup> MA Cohen, 'Oil Pollution Prevention and Enforcement Measures and their Effectiveness: A Survey of Empirical Research from the US' in Faure and Hu (eds.) *Prevention and Compensation of Marine Pollution Damage* (Kluwer Law International, The Netherlands, 2006) 30.

<sup>186</sup> Faure and Hui, above n 97, 321 citing D Abecassis, 'IMO and liability for oil pollution from ships: a retrospective', (1983) *Lloyds Maritime and Commercial Law Quarterly* 45-46; J Bongaerts and A Debievre, 'Insurance for civil liability for marine oil pollution damages' (1987) *The Geneva Papers on Risk and Insurance* 148; and Edgar Gold, *Handbook on Marine Pollution* (2<sup>nd</sup> ed, 1985) 44-47.

<sup>187</sup> *Draft Convention on Offshore Units, Artificial Islands and Related Structures Used in the Exploration for and the Exploitation of Petroleum and Seabed Mineral Resources 2001*, (not in force).

<sup>188</sup> *Convention on Civil Liability for Oil Pollution Damage resulting from Exploration for and Exploitation of Seabed Mineral Resources 1977 (Convention on Civil Liability for Oil Pollution Damage)*, 1977, 16 ILM 1451 (not yet in force).

<sup>189</sup> Faure and Hui, above n 97, 326.

<sup>190</sup> *Ibid* 326-327.

<sup>191</sup> Willis Insurance Brokers, *Rate Softening in Energy Insurance Market Stalled by First Quarter 2011 Losses* (2011)

<[http://www.willis.com/Media\\_Room/Press\\_Releases\\_\(Browse\\_All\)/2011/20110407\\_WillisEnergyMarketReviewPressRelease/](http://www.willis.com/Media_Room/Press_Releases_(Browse_All)/2011/20110407_WillisEnergyMarketReviewPressRelease/)> at 10 July 2011.

<sup>192</sup> Faure and Hui, above n 97, 324, 327, 341.

<sup>193</sup> Boyd, above n 74, 138.

<sup>194</sup> *Ibid* 138.

<sup>195</sup> *Ibid* 154.

Prior to the *Deepwater Horizon* incident, the largest NRD case by far was the *Exxon Valdez* recovery, involving USD2.1 billion in cleanup costs, approximately USD1 billion in natural resource damages,<sup>196</sup> and a USD5 billion punitive damage award.<sup>197</sup> Although the extent the NRDs arising from the *Deepwater Horizon* incident remain to be seen, there seems little doubt that these NRDs will be significantly and substantially in excess of those on the *Exxon Valdez* case.

Controversially, NRDs require the government to calculate the social loss associated with damages to resources that are not privately owned or traded, giving rise to a host of legal and technical issues.<sup>198</sup> Broadly, an NRD may be calculated by the technically difficult task of measuring the lost social benefit arising from the damage, or by the easier calculation of assessing the replacement costs of the damage incurred.<sup>199</sup> The requirement that the public be 'made whole' following a natural resource injury, combined with the inherent difficulties of natural resource valuation have been a source of political controversy and calls for reform.<sup>200</sup> Significant amounts of data regarding biophysical conditions and demand for the damaged services are required in most NRD cases, with the result that cases tend to be complex and not always successful.<sup>201</sup>

Nonetheless, by their very nature, NRDs provide flexibility and facilitate the ability of the coastal State to assess and calculate the social loss associated with any marine oil spill in the context of the coastal State's own social, political, economic and natural environment. Similarly, and as has been adopted under the US *OPA 1990*, the coastal State would have the definite advantage of being able to autonomously recover damages in excess of any statutory strict liability limit from a publically administered oil spill liability trust fund which can be financed primarily through a fee on crude oil production within the coastal State's jurisdiction.

### 8.3 Criminal Liability as a Means of Sanctioning Pollution Prevention

In his seminal article regarding the optimizing of penalties to deter criminal activity, Becker (1968) concludes that potential offenders respond to both the probability of detection and the severity of punishment if detected and punished.<sup>202</sup> Under a simplistic optimal penalty model the optimal penalty is arbitrarily high and the optimal expenditure on monitoring approaches zero but risk aversion, insolvency and fairness dictate against such a draconian policy.<sup>203</sup>

As a result, in relation to the likelihood of spills that might result in very large damages (such as is the case with offshore oil facilities), the only realistic enforcement policy that has typically been adopted in practice is one involving significant expenditure on government monitoring with additional penalties levied against operators that do not voluntarily report spills, and targeted monitoring focusing on operators considered to have the most likelihood of being out of compliance or prone to spilling oil.<sup>204</sup> Cohen (2006) suggests that the effectiveness of such government enforcement might be enhanced by the use of criminal law by virtue of the imposition of criminal liability increasing the negative publicity associated with the prohibited action, particularly if accompanied by the threat of imprisonment of individuals, and enhances the dramatic effect for a given penalty.<sup>205</sup>

Heine (2006) also advocates the criminal law as one of the legal remedies available for marine pollution.<sup>206</sup> He identifies the focus of the current international regime on marine pollution as being mainly on the compensation of victims and raises the question of whether the liability of perpetrators responsible for large scale marine pollution is adequately provided for.<sup>207</sup> Heine points out the irony inherent in the traditional 'channeling' of liability to the owner under existing strict liability regimes and the counter-productive effect of diluting or even

---

<sup>196</sup> Boyd, above n 74, 155.

<sup>197</sup> *Re Exxon Valdez*, 270 F 3d 1215 (Ala, 1996); quoted in Boyd, above n 74, 155.

<sup>198</sup> Boyd, above n 193, 138.

<sup>199</sup> *Ibid* 144.

<sup>200</sup> *Ibid* 151.

<sup>201</sup> *Ibid* 152.

<sup>202</sup> Gary Becker, 'Crime and Punishment: An Economic Approach' (1968) 76 *Journal of Political Economy* 169-217.

<sup>203</sup> Cohen, above n 185, 31.

<sup>204</sup> *Ibid* 31.

<sup>205</sup> *Ibid* 37.

<sup>206</sup> G Heine, 'Marine Oil Pollution: Prevention and Protection by Criminal Law – International Perspectives, Corporate and/or Individual Criminal Liability' in M G Faure and J Hu (eds), *Prevention and Compensation of Marine Pollution Damage* (Kluwer Law International, The Netherlands, 2006) 41; see also D M Ong, 'The Impact of Environmental Law on Corporate Governance: International and Comparative Perspectives' (2001) 12(4) *European Journal of International Law* 685, 705.

<sup>207</sup> Heine, above n 206, 44.

excluding the liability of the persons who actually caused the environmentally harmful pollution.<sup>208</sup> As such, the criminal law has a role to play to impose liability on the responsible perpetrator of the polluting event in conjunction with the compensation of victims of pollution pursuant to a civil liability regime.

In marine pollution cases, empirical data establishes that criminal liability, where it is sought to be imposed, is typically directed to the master of the vessel and that rather low financial penalties imposed.<sup>209</sup> Given the complexity and variety of faulty decisions throughout the vessel-owning corporation that lead to a major pollution incident, the application of criminal liability against an individual ‘scapegoat’ rather than the responsible corporation runs the risk of being arbitrary, ineffective and unfair.<sup>210</sup> There are essentially five reasons for this:<sup>211</sup>

1. Imposing criminal sanctions on individuals has been shown to be of limited effectiveness because fines need to be tailored to reflect the severity of the crime and the financial capacity of the individual and, in any event, are typically reimbursed by the company or by insurance.
2. Individual responsibility is predicated upon a single faulty act whereas marine pollution typically results from collective responsibility arising from incorrect developments carried out by many different actors over a period of time.
3. Unlike individual responsibility, a system of collective responsibility facilitates an effective, proportionate and dissuasive imposition of sanctions where individual capacities are restricted as compared to the more comprehensive liability of corporations.
4. The traditional imposition of sanctions on individuals does not promote or foster a good corporate citizen culture or the implementation of organizational structures that facilitate effective and adequate risk management.
5. To avoid an international bureaucracy imposing ever-increasing regulations and direct state surveillance and in recognition that detailed knowledge of specific risks is more effectively developed over time through entrepreneurial experience, the imposition of corporate criminal liability for marine pollution from offshore facilities would allow market-control mechanisms to play a greater role and inevitably lead to a strengthening of entrepreneurial collective self-responsibility.

Historically, corporate criminal liability has foundered on the principle of *societas delinquere non potest*, namely the concept that there is no body to hit and no soul to be influenced in relation to a corporate entity.<sup>212</sup> In recent times, there is a greater recognition in most international conventions of a need for (criminal) sanctions to be imposed on legal entities and most jurisdictions have incorporated distinct forms of corporate liability in their respective national legal systems.<sup>213</sup> There is a preponderance of modern legislation in many jurisdictions where corporate criminal liability is predicated and imposed upon corporations exercising improper risk management as a result of deficiencies in the organization or inadequacies in the corporate culture.<sup>214</sup> For example, in Australia the *Criminal Code* imposes liability upon the corporation if the circumstances of the offence are such that the company has expressly, tacitly or impliedly authorized or permitted the incident, irrespective of any personal responsibility for the wrongdoing.<sup>215</sup>

The conventional sanction imposed against corporations is the fine. As has been adopted in EU regulations, imposing fines in an amount that is calculated by reference to a certain percentage of turnover or assets ensures that fines are dissuasive and in proportion with the economic capacity of the organization. For example, EU regulations impose fines as a function of turnover from the previous year; from 1% to 10% in less serious cases, and from 10% to 20% in the most serious cases.<sup>216</sup> The distinct advantage of structuring fines in such a way is

---

<sup>208</sup> Ibid 44-45.

<sup>209</sup> Ibid 49.

<sup>210</sup> Ibid 48-49.

<sup>211</sup> Ibid 50-51.

<sup>212</sup> Ibid 42.

<sup>213</sup> Ibid 51.

<sup>214</sup> Ibid 52.

<sup>215</sup> *Criminal Code Act 1995* (Cth) ss 12.2, 12.3(2)(c). Cited in Heine, above n 206, 53.

<sup>216</sup> Council Framework Decision to strengthen the criminal-law framework for the enforcement against ship-source pollution of 2 May 2003 (COM(2003) 227); Greenbook of the EC-Commission of 30 April 2004, 16; *Draft Corporate Liability Law of Austria*, IMZ 318 017/0001-11 2/2004; cited in Heine, above n 206, 53.

that it compels corporations to factor the likelihood and potential amount of such fine as part of its financial accounting of its risk management function.

The flexibility of other sanctions is also potentially available as a function of the imposition of criminal liability. These may include the payment of compensation to victims, such as in the *Zeebrugge Ferries Case* in the UK, the awarding of criminal restitution for the damage caused to the wildlife and natural environment, as was ordered in the *Exxon Valdez Case* in the US, the imposition of operational duties to improve the risk management of the organization or restrictions to entrepreneurial activity, and may even include the confiscation of property gained as a result of the prohibited activity.<sup>217</sup>

The present author agrees with the position advocated by Heine (2006). The imposition of corporate criminal liability for marine pollution incidents upon enterprises with faulty risk management or defective corporate culture would duly and properly recognize such incidents as the social disturbances that they are, which under certain legal circumstances should properly fall within the responsibility of the entity that has encouraged and typically benefitted from the incident or the circumstances concerned. The broad spectrum of sanctions available facilitates having the penalties 'fit the crime' and ensuring that corporations factor the possibility of such sanctions into the risk management function and corporate culture of the enterprise.<sup>218</sup>

## 9 Conclusion

Based on the results of the research in this paper, it is abundantly clear that:

1. the current marine oil pollution liability regime applicable to marine pollution from offshore oil facilities is patently insufficient and inadequate; and
2. coastal States are responsible for the resultant lack of accountability and any non-recoverability of claims arising under the current legislative regime.

The enormous environmental impact of, and significant claims arising from the Macondo and Montara incidents highlight that the achievement of environmental integrity, especially as regards the marine environment, can only be realized via international co-operation. The current and continuing lack of a cohesive international framework governing the regulation and liability for marine pollution from offshore facilities inevitably raises the spectre of international State responsibility and emphasizes the crucial need for the adoption of an international legal regime to discourage and avert marine pollution from offshore facilities and to properly address affected environmental interests should such pollution occur. Based on the analysis within this article, an appropriate (and urgently required) legal regime would be constituted by:

1. a species of a strict civil liability regime backed by a compulsory liability insurance scheme up to USD1 billion coupled with an industry-funded liability trust fund, thereby providing a more satisfactory and effective vehicle for transnational environmental accountability for marine pollution damage arising from offshore facilities; and
2. the imposition of corporate criminal liability for oil pollution from offshore facilities upon enterprises with faulty risk management or defective corporate culture, thereby properly recognizing such incidents as the grave social disturbances that they are, promoting accountability and encouraging a corporate culture of responsible risk management.

---

<sup>217</sup> Heine, above n 206, 54.

<sup>218</sup> *Ibid* 55-56.