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Seeing beyond the horizon for deepwater oil and gas: strengthening the international regulation of offshore exploration and exploitation

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A NEVER-ENDING RUSH TO OFFSHORE OIL AND GAS

The last decades have been marked by a considerable development of offshore oil and gas activities. Because of an increasing energy demand and technological innovations, drilling activities extended and moved into deep and ultra-deep water areas. As of today, almost a third of the oil and a quarter of the natural gas consumed in the world come from underwater areas and this rush to offshore oil and gas exploration and exploitation is not about to end: forecasts show a continuing growth of production in traditional offshore regions and significant development in new areas.

INCREASING THREATS TO THE ENVIRONMENT

Drilling more and deeper unquestionably means increasing the threats to the environment and natural resources. Recent accidents on offshore platforms have demonstrated that the environmental risks of offshore drilling activities concern all regions in the world and all types of companies, even the big players. Because these accidents had transboundary impacts, discussions were recently reopened on the suitability of the current international framework to regulate offshore oil and gas activities. In this regard, it clearly appears that there are important regulatory gaps, both in terms of safety of offshore drilling activities and liability and compensation in case of accidents.

BETWEEN STRATEGY AND REALISM: BUILDING ON THE REGIONAL LEVEL TO STRENGTHEN THE REGULATION OF OFFSHORE DRILLING ACTIVITIES

Strengthening the regulation of offshore drilling activities could mainly come from the regional level, for two main reasons. First, the adoption of global conventions dealing with safety on the one hand, on liability and compensation on the other hand, seems very unlikely in the short term: as of today, the strong opposition from certain States, as well as the absence of a "champion" institution, prevent from achieving it, even if this ambition should not be abandoned. Second, there are regional organisations on which States can rely to better regulate offshore drilling activities, regional seas programmes in particular. However, in most countries, the resolution of environmental problems related to offshore oil and gas exploration and exploitation will not come from the sole adoption of agreements, even legally binding. That is the reason why a strategic framework is needed in order to create the conditions for success of current and future regional binding agreements.

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Context of the report

This report is part of the project "Towards an international regulation of offshore oil and gas exploration and exploitation", led by the Institute for Sustainable Development and International Relations (IDDRI) and co-funded by the Prince Albert II of Monaco Foundation, the MAVA Foundation and the FIBA Foundation. Launched in 2012, this project aims at feeding the discussions that currently take place in various international and regional arenas by: (i) proving an analysis of the international framework regulating offshore drilling activities; (ii) highlighting the main regulatory gaps and (iii) identifying robust and feasible options to fill them.

The report has been elaborated through an in-depth analysis of the existing literature and several interviews of representatives of international and regional organisations, national

administrations, private sector, research centres and non-governmental organisations. Preliminary findings have been presented and discussed during conferences and workshops, including: the experts meeting organised by IDDRI on 30 March 2012 in Paris, France; the 10th Annual Colloquium of the IUCN Academy of Environmental Law, Baltimore, United States, 1-5 July 2012; the Seminar on Sustainable Development and Environmental Economics, Paris, 26 March 2013; the Informal dialogue on offshore oil and gas exploration and exploitation organised by IDDRI on 31 May 2013 in Paris.

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LIST OF ACRONYMS

ACAP Arctic Contaminants Action Program
AEPS Arctic Environmental Protection Strategy
AMAP Arctic Monitoring and Assessment Programme

ASEAN Association of Southeast Asian Nations

BOE Barrels of oil equivalent

CAFF Conservation of Arctic Flora and Fauna
CJEU Court of Justice of the European Union

CLEE Convention on Civil Liability for Oil Pollution Damage from Offshore Activities

CMI Comité Maritime International CMLA Canadian Maritime Law Association

COP Conference of Parties

EIA Environmental Impact Assessment

EPPR Emergency Prevention, Preparedness and Response

EU European Union

GMEP Global Marine Environment Protection

ICJ International Court of Justice
 IEA International Energy Agency
 ILC International Law Commission
 IMO International Maritime Organisation
 IPCC Intergovernmental Panel on Climate Change

IPIECA Global Oil and Gas Industry Association for Environmental and Social Issues

ITLOS International Tribunal for the Law of the Sea
IUCN International Union for Conservation of Nature

MAP Mediterranean Action Plan

MCSD Mediterranean Commission on Sustainable Development

MEPC Marine Environment Protection Committee
MLA Maritime Law Association of the United States

MSFD Marine Strategy Framework Directive NGO Non-Governmental Organisation

OECD Organisation for Economic Cooperation and Development

OGP International Association of Oil & Gas Producers

OJEU Official Journal of the European Union

OPEC Organisation of the Petroleum Exporting Countries

OPOL Offshore Pollution and Liability

PAME Protection of the Arctic Marine Environment

RAC Regional Activity Centre

REMPEC Regional Marine Pollution Emergency Response Centre for the Mediterranean Sea

SDWG Sustainable Development Working Group
SEA Strategic Environmental Assessment
SIDS Small Islands Developing States
TEU Treaty on European Union

TFEU Treaty on the Functioning of the European Union UNCLOS United Nations Convention on the Law of the Sea

UNDP United Nations Development Programme
UNEP United Nations Environment Programme

UNFCCC United Nations Framework Convention on Climate Change

WIO Western Indian Ocean WWF World Wildlife Fund

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1. INTRODUCTION

Nec tantum segetes alimentaque debita dives poscebatur humus, sed itum est in viscera terrae, quasque recondiderat Stygiisque admoverat umbris, effodiuntur opes, inritamenta malorum.

Ovidius, Metamorphoseum, I/135-140.

1.1. A never-ending rush to offshore oil and gas

The history of offshore drilling started in 1896, when the first submerged oil well was drilled in salt waters off the coast of Summerfield, California, United States (US), extending up to 410 metres from the shorelines and reaching 10 metres to the floor of the Pacific. Half a century later, in 1947, the first well from a fixed platform located out-of-sight of land was drilled off the Louisiana coasts, in water depths around 5 metres (National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling, 2010). However, underwater drilling really took off in the 1970s, as the dual effect of a political factor—the desire of consumer countries to lessen their dependence on the Gulf States by developing their own energy sources—and technological developments making it possible to drill ever further from coastlines and at ever greater depths (Serbutoviez, 2012): industrials reached the deep offshore environment¹ in 1975 (Morrison, 1980; Dragani and Kotenev, 2013) and the ultra-deep offshore² in 1986, both in the Gulf of Mexico. Whereas just after the Second World War industries were only drilling in around 10 metres of water, it is now increasingly common for rigs to drill at a depth of over 2 kilometres and the new world water-depth record was established in January 2013 off India at a depth of 3,165 metres.³ Because of technical innovations and an increasing energy demand, almost a third of the oil and a quarter of the natural gas consumed in the world come from underwater areas. As Map 1 illustrates, the most important offshore production regions include the North Sea, the Persian Gulf, Western and Central Africa, the Gulf of Mexico, the Mediterranean, the Caspian Sea and Southeast Asia.

Furthermore, the production of oil and gas from offshore sources is expected to increase in the coming years. Indeed, activities remain high in traditional offshore regions (GBI, 2012) while "operators are moving exploration and development into new areas" (Pike, 2013). Industrials are first focusing on the so-called "Deep water Golden Triangle", composed of the Gulf of Mexico, Western Africa and Brazil, where significant discoveries have been made over the years in the US and Mexican Gulf of Mexico (PCF Energy, 2011), in Nigeria, Ghana, Gabon and Sierra Leone⁴ (Figure 1), or in Brazil⁵ where the pre-salt fields could have a potential of 70 to 100 billion barrels of oil equivalent (BOE).6 Moreover, beyond this Golden Triangle, new regions are currently attracting firms' interest. Eastern Africa unquestionably appears to be a new Eldorado for offshore drilling activities. As the United States Secretary of State John Kerry

Depths of 300 metres, i.e. 1,000 feet, though definitions vary.

^{2.} Depths of 1500 metres, i.e. 5000 feet.

^{3.} http://www.oilandgastechnology.net/upstream/oceaneering-breaks-rov-depth-record-offshore-india

http://www.epmag.com/item/Great-expectations-West-Africas-emerging-frontiers_IIIO3I

http://www.brasil.gov.br/energia-en/pre-salt/ new-reserves/br_modeli?set_language=en

Amount of energy that is equivalent to the amount of energy found in a barrel of crude oil.

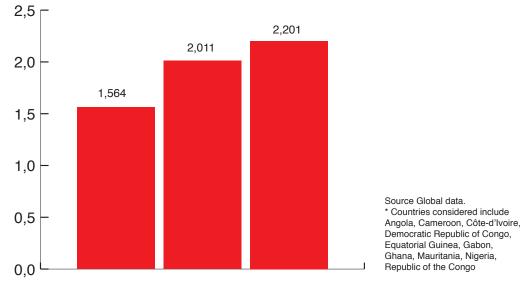
Pacific Ocean Caspian Sea Mediterranean Sea Gulf of Mexico and Caribbean Sea Persiar Gulf South China Sea Ocean West Africa **Pacific** Indian Ocean 2,000 km to the equator Offshore gas production: 2006 Offshore oil production: 2006 △ Oil fields 0-100 Mm³ 100-200 Mm³ +200 Mm³ 0-100 Mt 100-200 Mt 200-400 Mt +400 Mt ▼ Gas fields

Map 1. Worldwide offshore oil and gas production

Source: A Planet for life, 2011.

Figure 1. Forecast production of oil and natural gas from offshore fields in West Africa

Oil an gas exploration industry, West Africa* forecast production of oil and natural gas from offshore fields, MMboe, 2011 an 2020



Source: http://www.giiresearch.com/press/6599.shtml

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Flaring

Vents

Spills

Cooling water

Displacement water

Cuttings piles

Source: http://www.giiresearch.com/press/6599.shtml

Figure 2. Substances released during routine offshore oil and gas production

highlighted in February 2013, "four of the five biggest oil and natural gas discoveries happened off the coast of Mozambique last year alone"7 and exploration is also underway in Kenyan, Tanzanian, Madagascar and Seychelles' waters. Recent offshore gas discoveries in the Eastern Mediterranean also whet investors and coastal States' appetite, which already rekindled tensions in the region - between Israel and Lebanon (Wählisch, 2011) or Turkey and Cyprus for instance.8 Last, the Arctic (Map 2), which could hold about 13% of the world's undiscovered oil reserves and as much as 30% of the world's undiscovered natural gas (Oistein et al., 2011), still appears to be an Eldorado for drilling activities. However, the recent problems faced by drilling companies (Shell, Statoil, ConocoPhillips, etc.), as well as shale gas exploitation which is less costly, challenge Arctic gas development in the short term (Ernst and Young, 2013).

The conclusions are therefore obvious. First, the production of oil and gas from offshore sources is getting more and more important. Second, drilling activities are moving into increasingly deep waters and extreme environments.

Map 2. Areas in the Arctic containing oil and gas



Source: http://www.compasscayman.com/observer/2011/03/06/Russia-drills-in-the-Arctic/

1.2. Increasing threats to the environment

Drilling more and deeper unquestionably means increasing the threats to the environment and natural resources. Impacts of offshore drilling on the environment are numerous, including the disturbance of fish stocks⁹ and marine mammals

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^{7.} J. Kerry, Address at the University of Virginia, 20 February 2013. Full speech available at: http://www.state.gov/secretary/remarks/2013/02/205021.htm

^{8.} http://www.reuters.com/article/2013/03/21/turkey-cyprus-gas-idUSL6NoCD7AI20130321

Recognising that seismic exploration has led to a depletion of tuna in Namibia's waters by disrupting their

during seismic surveys (CEF Consultants, 2008; Gordon *et al.*, 2003), carbon dioxide and methane emissions through gas flaring and venting (Buzcu-Guven and Harris, 2012; Gerner *et al.*, 2004) and pollution of the marine environment through the discharge of various substances (Figure 2), drilling fluids and cuttings in particular (Qunjie *et al.*, 2012). Worst-case scenario occurs when the well blows out.

Contrary to common thought and even if techniques slightly differ, the type of risks is actually similar when drilling is made inland or in deep waters (Rochette, 2012). The real difference comes from the remediation aspects: fixing a problem in deep waters is more complex, as has been illustrated in many recent accidents on offshore platforms. For instance, the Montara rig leaked in 2009 for 74 days (Australian maritime safety authority, 2010) and the Deepwater Horizon released nearly 5 million barrels of oil into the sea over 87 days before it was possible, on 15 July 2010, to cap the well (National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling, 2010).

Because recent accidents on offshore platforms had transboundary impacts, discussions were reopened on the suitability of the current international framework to regulate offshore oil and gas activities.

1.3. Questioning the suitability of the international framework regulating offshore drilling activities

As shipping, offshore drilling activities raise two main legal issues. The first one deals with the safety rules under which these activities are carried out. The second is related to the liability and compensation regime to be applied when an accident occurs. The comparison between shipping and offshore drilling activities stops here: the international conventions "apply primarily or exclusively to accidents involving tankers" (Galbraith, 2010) and the international rules regulating shipping are considerably more developed than those regulating offshore drilling activities.

The 1982 United Nations Convention on the Law of the Sea (UNCLOS) provides for an application of the 1945 Truman Doctrine which states: "the exercise of jurisdiction over the natural resources of the subsoil and sea bed of the continental shelf by the contiguous nation [in this case the United

States] is reasonable and just". 10 Article 76 defines the continental shelf while Article 77-1 establishes that, within the limits provided, coastal States exercise their "sovereign rights for the purpose of exploring it and exploiting its natural resources". Article 77-4 points out that "the natural resources (...) consist of the mineral and other non-living resources of the seabed and subsoil together with living organisms belonging to sedentary species (...)". According to this article, coastal States have therefore sovereign rights to exploit oil and gas contained in their continental shelf. As a balance, Part XII provides obligations with regard to the protection and preservation of the marine environment. In particular, Article 194-3(c) binds States "to minimize to the fullest possible extent pollution from installations and devices used in exploration or exploitation of the natural resources of the seabed and subsoil", which covers pollution from offshore platforms. In this regard, Articles 208-1 and 208-2 particularly bind States to "adopt laws and regulations to prevent, reduce and control pollution of the marine environment arising from or in connection with seabed activities subject to their jurisdiction and from artificial islands, installations and structures under their jurisdiction (...)" and, more broadly to take any other "measures as may be necessary to prevent, reduce and control such pollution". Last, Article 208-5 invites States to cooperate and "establish global and regional rules, standards and recommended practices and procedures to prevent, reduce and control pollution of the marine environment (...)". Through these general provisions, UNCLOS "lacks the specificity in international regulation and punishment to be a viable international treaty with the power to cover adequately pollution from fixed platforms" (Smith, 2011). However, UNCLOS provides a legal basis to create an international regime relating to the pollution of the marine environment from offshore oil and gas activities.

Article 235 of UNCLOS is specifically dedicated to responsibility and liability. Article 235-3 states in particular that: "with the objective of assuring prompt and adequate compensation in respect of all damage caused by pollution of the marine environment, States shall cooperate in the implementation of existing international law and the further development of international law relating to responsibility and liability for the assessment of and compensation for damage and the settlement of related disputes, as well as, where appropriate, development of criteria and procedures for payment of adequate compensation, such as

migratory routes, the government is about to ban oil and gas exploration during the tuna fishing season: http://allafrica.com/stories/201311250417.html

^{10.} Proclamation No 2667, 3, C.F.R., p.67.

compulsory insurance or compensation funds". This article therefore binds States to collectively develop international rules related to liability and compensation: it applies to damages resulting from the exploration of the continental shelf and the exploitation of natural resources.

Whereas UNCLOS provides the legal basis for developing international rules both on the prevention of pollution from offshore activities and on liability and compensation in case of accidents, no such regime has been established yet (Rares, 2011): no international convention specifically sets standards determining the conditions under which States should issue drilling permits (Chabason, 2011) and no international agreement provides specific rules on liability and compensation for damage from the exploitation of mineral resources of the seabed (Scovazzi, 2012; Cates, 1984). Against this background, it is questionable whether the current international framework meets the threats facing the environment and natural resources.

1.4. Objectives of the report

In face of the current and future developments of offshore drilling, this report questions the suitability of the international framework regulating it. Covering both safety and liability and compensation," it analyses the current international and regional regulations, highlights the regulatory gaps and explores options to fill them, focusing on the most appropriate level of intervention and on the principles upon which offshore drilling activities should be based. The general objective of this report is to present a comprehensive analysis of the current international framework, provide concrete proposals to strengthen it, and feed the discussions that currently take place in various international and regional arenas.

1.5. Outline

Section 2 analyses the international and regional frameworks regulating the safety of offshore drilling activities while Section 3 presents the rules relating to liability and compensation for oil pollution damage resulting from offshore oil and gas exploration and exploitation. Based on this analysis, Section 4 identifies the main regulatory

gaps and needs, and explores options for moving forward. Last, Section 5 concludes by summarizing the main challenges at stake and presenting possible options to tackle them.

2. SAFETY OF OFFSHORE DRILLING ACTIVITIES: CURRENT INTERNATIONAL AND REGIONAL REGULATION

While (...) discussing offshore activities last month, I was introduced to the four Ds, which, from now on, are destined to characterize the offshore oil industry in its search for black gold: Deep, Distant, Dangerous and Difficult.

Efthimios E. Mitropoulos, Former Secretary-General of the International Maritime Organisation, 15 November 2010.

In recent years, attempts to elaborate an international agreement regulating offshore drilling activities have been made (2.1). However, these failed and it is therefore at the regional level that intergovernmental regulations have progressively but partially been adopted (2.2).

2.1. Attempts to elaborate an international agreement on the safety of offshore drilling activities

2.1.1. The international draft Convention on offshore mobile craft

In the late 1970s, the Comité Maritime International (CMI), a non-governmental organisation (NGO) for maritime law unification, elaborated at the request of the International Maritime Organisation (IMO), a draft Convention on offshore mobile craft. The 1977 draft Convention aimed at applying to offshore mobile craft various conventions already adopted in the field of navigation. In 1990, the IMO Legal Committee asked the CMI to review the 1977 draft Convention. The CMI established a working group which first proposed in 1994 a similar draft Convention following the principle of incorporation by reference of existing treaties. The principle of incorporation by reference did not find favour with the IMO Legal Committee which in 1995 encouraged the CMI to pursue an entirely new approach. The CMI working group then expanded its work with the encouragement of several national maritime law associations, including the Canadian Maritime Law Association (CMLA) which issued in March 1996 a Discussion Paper supporting the preparation by the CMI of a comprehensive international

This report however does not address the issues related to preparedness and response in case of accidents, mainly regulated by the International Convention on Oil Pollution Preparedness, Response and Cooperation (OPRC, 1990) and specific regional agreements adopted within Regional Seas Programmes.

instrument for subsequent negotiation within IMO. While several national maritime law associations expressed support for this option, some industry associations and the Maritime Law Association of the United States (MLA) opposed CMI's work on this process. 12 The CMLA proceeded on its own initiative and released in 2000 a comprehensive draft convention of 14 articles which addressed technological, legal and environmental developments. The CMLA draft Offshore Units Convention, while was not adopted by the CMI, was published with a view to encouraging further debate.13 At the CMI Vancouver Conference in June 2004, the offshore convention working group noted IMO's lack of interest for this initiative.

2.1.2. The G20 initiative: from a proposal of an international convention to a website

On 5 June 2010, on the World Environment Day, the President of the Russian Federation Dmitry Medvedev highlighted the need "to put in place a modern framework of international law [in the area of offshore drilling activities], perhaps in the form of a convention or several agreements that will address issues of the kind arising from disasters such as that in the Gulf of Mexico". 14 A few days later, the G20 meeting held on 26-27 June 2010 in Toronto, Canada, recognised "the need to share best practices to protect the marine environment, prevent accidents related to offshore exploration and development, as well as transportation, and deal with their consequences".15 The language used in the final declaration was prudent: "best practices" and not "convention" was mentioned. However, during the press conference organised after the meeting, President Medvedev considered "it would make sense to draft a new legal framework in order to prevent and minimise effectively" the environmental risks related to offshore drilling activities (Box 1). The Russian initiative therefore seemed to be ambitious, as demonstrated by the potential content of the convention suggested by the Russian Federation: (i) application of environmental impact assessments that consider impacts at all stages of exploration, production and suspension; (ii) preventive development of infrastructure to enable rapid and effective response and establishing effective training systems for oil

Box 1. Speech given by the President of the Russian Federation Dmitry Medvedev in June 2010¹

"Another subject concerns the idea that I formulated back in Moscow [in the interview to the Wall Street Journal] regarding the cleanup following the accident in the Gulf of Mexico. Today I presented this idea here at the summit too. The proposal is to establish an international mechanism for preventing and liquidating these kinds of offshore accidents and protecting the marine environment in general.

The main problem here is not so much lack of funds, although accidents of the type that happened in the Gulf of Mexico are very costly, and the environmental damage they cause is beyond any financial measure. But the real problem is political and legal in nature: we simply do not have the full-fledged foundation of legal agreements needed to deal with these kinds of issues. There are a number of separate conventions—I especially looked into this and examined these conventions. These are agreements dealing with specific issues, a convention concerning oil spills, for example, or the international convention on the law of the sea, and they all address specific issues, but none of them provide a comprehensive vision.

I think it would therefore make sense to draft a new international legal framework in order to prevent and minimize effectively these kinds of dangerous accidents. What kind of provisions would such a framework involve? One idea, which will need further discussion, of course, is for the big international companies involved in oil production to pay a percentage of their profits into a special consolidated fund, and (perhaps in addition thereto) to make payments that would be used to insure against these kinds of risks. In other words, this special fund could be established, and also a special insurance programme. We agreed to get our experts to study this proposal and report on their conclusions at the summit in Seoul. I think this is an important matter. In passing, I note too that Russia wants to set an example here and not stand on the sidelines, and we are therefore ready to submit a draft law to our State Duma on protecting the marine environment from pollution caused by oil".

i. http://eng.news.kremlin.ru/transcripts/517/print

spill response personal; (iii) thorough risk assessments incorporating blowout events; (iv) spatial planning ensuring security of biological resources; (v) transfer of technology to developing nations that could be impacted from oil spills, (vi) appropriate financial structure, possibly through funds built from a company's money, etc.¹⁶

Following Russia's proposal, the G20 Global Marine Environment Protection (GMEP) Initiative was launched and a specific Working Group was created in 2010. However, such ambition declined rapidly. At the G20 meeting held on II-I2 November 2010 in Seoul, Korea, the progress achieved by the GMEP towards the goal of sharing best practices was welcomed¹⁷ but no mention was made about a potential international convention.

IMO, Legal Committee, 79th session, February 1999, I:\ LEG\79\6-2.WPD.

http://www.comitemaritime.org/Uploads/ Newsletters/2004/Binderr.pdf

^{14.} http://www.unep.org/wed/2010/english/PDF/ PresidentMedvedev_WED.pdf

^{15.} Declaration of the G-20 Toronto Summit, §43.

^{16.} http://www.rusembassy.ca/node/439

G20 Seoul Summit Leader's Declaration, 11-12 November 2010, §64.

In Cannes, France, on 4 November 2011, G20 leaders mentioned a "mechanism to share best practices". ¹⁸ Last, during the G20 meeting held on 18-19 June 2012 in Los Cabos, Mexico, it was publicly announced that this sharing mechanism would take the form of a website. ¹⁹ Gathered in Saint Petersburg, Russia in September 2013, representatives of the G20 encouraged "to make full use of the website". ²⁰

Within a few months, the idea to develop an international convention on drilling activities has therefore been substituted by a website. However, the final outcome of this initiative is not that surprising: the 2010 Russian proposal was received with skepticism by many experts who always considered that no progress would be made within the G20 framework.

2.1.3. Conclusion

Initiated several years apart, attempts aimed at elaborating an international agreement on the safety of offshore drilling activities both failed. These failures reflect the difficulty for the international community to agree on the development of a binding instrument regulating an economic activity, vital for many States. As in many other areas, it is at the regional level that steps forward have progressively been made.

2.2. Development of regional agreements regulating offshore drilling activities

In recent years, regional agreements regulating offshore drilling activities have been adopted, both within UNEP regional seas programmes (2.2.1) and the European Union (2.2.2).

2.2.1. Agreements within regional seas programmes

2.2.I.I. General provisions of regional seas conventions and action plans

Organised in Stockholm in June 1972, the United Nations Conference on the Human Environment led to the creation of UNEP "to serve as a focal point for environmental action and coordination within the United Nations system".²¹ At its

 Cannes Summit Final Declaration, Building our common future: renewed collective action for the benefit of all, 4 November 2011, §58. first session, UNEP identified oceans as a priority area for action²² and its Regional Seas Programme was then initiated in 1974²³ "as an action-oriented programme having concern not only for the consequences but also for the causes of environmental degradation and encompassing a comprehensive approach to combating environmental problems through the management of marine and coastal areas" (UNEP, 1982). Since it was launched, the Regional Seas Programme has proven attractive, as evidenced by the 143 States participating across 18 regions.²⁴

As framework documents, most regional seas conventions and action plans include general provisions dealing with the pollution from activities relating to exploration and exploitation of the seabed. The relevant articles vary from one region to another, but the main objective is generally the same: urging States to take all appropriate measures to prevent, reduce, combat and control pollution resulting from exploration and exploitation of the continental shelf. That is the case, for instance, in the Baltic Sea, Mediterranean, North-East Atlantic, Red Sea and Gulf of Aden, West, Central and Southern Africa, Western Indian Ocean³⁰

- 22. UNEP, Report of the governing council on the work on its first session, 12-22 June 1973, United Nations, New York, 1973.
- 23. UNEP, Report of the governing council on the work on its second session, II-22 March 1974, United Nations, New York, Decision 8(II).
- 24. Here we refer to the UNEP administered regional seas (East Asian Seas, Mediterranean, North-West Pacific, Western and Central Africa, Western Indian Ocean, Wider Caribbean), UNEP associated regional seas (Black Sea, North-East Pacific, Red Sea and Gulf of Aden, ROPME Sea, South Asian Seas, South-East Pacific, Pacific) but also independent regional seas (Arctic, Antarctic, Baltic Sea, Caspian Sea, North East Atlantic).
- Convention on the protection of the marine environment of the Baltic Sea area, adopted on 22 March 1974, Article 12.
- 26. Convention for the protection of the marine environment and coastal region of the Mediterranean, adopted on 10 June 1995, Article 7
- Convention for the protection of the marine environment of the North-East Atlantic, adopted on 22 September 1992, Article 5.
- 28. Convention for the conservation of the Red Sea and the Gulf of Aden environment, adopted on 14 February 1982, Article 7
- 29. Convention for cooperation in the protection and development of the marine and coastal environment of the West, Central and Southern African Region, adopted on 23 March 1981, Article 8
- 30. Amended Convention for the protection, management and development of the marine and coastal environment of the Western Indian Ocean, adopted on 31 March 2010, Article 8.

^{19.} G20 Leaders Declaration, Los Cabos, Mexico, §76.

^{20.} G20 Leader's Declaration, Saint Perburg, Russia, 5-6 September 2013, §98.

United Nations General Assembly, Resolution 2997 (XXVII) of 15 December 1972.

and Wider Caribbean.³¹ In the same way, regional seas conventions or action plans generally include a specific provision dealing with the elaboration of rules and procedures for the determination of liability and compensation for damage resulting from pollution of the marine environment.³² Last, some regional seas have also developed agreements organising the cooperation among States Parties in case of pollution which cover pollution from offshore installations.³³ Based on the relevant articles of the framework conventions, some regions went one step further and developed specific regional instruments regulating offshore drilling activities.

2.2.1.2. Specific regional agreements regulating offshore drilling activities

Within some regional seas programmes, specific agreements or strategies, binding or not, aimed at regulating offshore drilling activities have been elaborated over the last years. The following developments provide an overview of the most significant initiatives.

Arctic

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In 1991, the eight Arctic countries—Canada, Denmark (including Greenland and Faroe Islands), Finland, Iceland, Norway, Russian Federation, Sweden and the United States—adopted the Arctic Environmental Protection Strategy (AEPS), a nonbinding document which provided "for the protection, enhancement and restoration of environmental quality and the sustainable utilisation of natural resources".³⁴ This strategy added "little to

- Convention for the protection and development of the marine environment of the Wider Caribbean region, adopted on 24 March 1983, Article 8.
- 32. Convention for the protection of the marine environment and coastal region of the Mediterranean, Article 16; Convention for the protection, management and development of the marine and coastal environment of the Western Indian Ocean, Article 16; Convention on the protection of the marine environment of the Baltic Sea area, Article 25; Convention for cooperation in the protection and development of the marine and coastal environment of the West; Central and Southern African Region, Article 15; Convention for the conservation of the Red Sea and the Gulf of Aden environment, Article 13.
- 33. For instance: Protocol concerning regional cooperation in combating pollution by oil and other harmful substances in cases of emergency, adopted on 14 February 1982 (Red Sea and Gulf of Aden); Protocol concerning cooperation in combating oil spills in the Wider Caribbean region, adopted on 24 March 1983; Protocol concerning cooperation in preventing pollution from ships and, in cases of emergency, combating pollution of the Mediterranean Sea, adopted on 25 January 2002; the NOWPAP regional oil and HNS spill contingency plan for the North West Pacific Region, adopted in December 2008.
- 34. Arctic Environmental Protection Strategy (AEPS),

the existing environmental monitoring programme of the Arctic States" (Rothwell, 1996) but provided "a foundation for future work" (Nowlan, 2001). Indeed, five years later, the 1996 Ottawa Declaration established the Arctic Council, an intergovernmental organisation aimed at providing "a means for promoting cooperation, coordination and interaction among the Arctic States, with the involvement of the Arctic indigenous communities and other Arctic inhabitants on common Arctic issues, in particular issues of sustainable development and environmental protection in the Arctic".35 Extending the scope of cooperation beyond purely environmental issues, the Arctic Council is a "natural outgrowth of the APES" (Nowlan, 2001) and an independent Regional Sea. In addition to the eight Arctic countries, the Council has "permanent participants", a category created for "active participation and full consultation with the Arctic indigenous representatives",36 and observers, such as intergovernmental organisations or NGOs.³⁷ The Council's activities are conducted in six working groups: Arctic Contaminants Action Program (ACAP), Arctic Monitoring and Assessment Programme (AMAP), Conservation of Arctic Flora and Fauna (CAFF), Emergency Prevention, Preparedness and Response (EPPR), Protection of the Arctic Marine Environment (PAME), Sustainable Development Working Group (SDWG). Through these working groups, the Arctic Council had the opportunity to address offshore oil and gas activities.

Prepared by PAME with the support of EPPR, AMAP and CAFF, the Arctic Offshore Oil and Gas Guidelines were adopted in 1997,³⁸ and updated in 2002³⁹ and 2009.⁴⁰ "Intended to be of use to the

- Rovaniemi, Finland, June 1991, §2.1(ii).
- 35. Declaration on the establishment of the Arctic Council Joint communiqué of the governments of the Arctic countries on the establishment of the Arctic Council, Ottawa, Canada, 19 September 1996, §1. These permanents participants are: the Aleut International Association, the Arctic Athabaskan Council, Gwich'in Council International, Inuit Circumpolar Council, the Russian Association of Indigenous Peoples of the North, and the Saami Council. These indigenous peoples groups are not voting members.
- 36. Declaration on the establishment of the Arctic Council Joint communiqué of the governments of the Arctic countries on the establishment of the Arctic Council, Ottawa, Canada, 19 September 1996, §2.
- The list of observers is available at: http://www.arcticcouncil.org/index.php/en/about-us/arctic-council/ observers
- 38. Fourth Ministerial Conference on the protection of the Arctic environment, 11-12 June 1997, Alta, Norway.
- 39. Second Ministerial Meeting of the Arctic Council, 9-10 October 2002, Inari, Finland.
- 40. Sixth Ministerial Meeting of the Arctic Council, 29th

Arctic nations for offshore oil and gas activities during planning, exploration, development, production and decommissioning",41 the provisions of this non-binding document "are derived from and invoke existing and legally binding instruments, including the law of the sea convention, various agreements drawn up under the International Maritime Organisation and regional treaties" (Stokke, 2011). Moreover, the Guidelines for Environmental Impact Assessment in the Arctic adopted in 1997 cover offshore drilling activities.42 Last, the Agreement on Cooperation on Marine Oil Pollution Preparedness and Response in the Arctic was adopted in May 2013.43 Second legally binding instrument adopted within the Arctic Council framework, this agreement aims at strengthening "cooperation, coordination and mutual assistance among the Parties on oil pollution preparedness and response in the Arctic in order to protect the marine environment from pollution by oil". It binds States to "maintain a national system for responding promptly and effectively to oil pollution incidents",44 identify focal points in case of emergency,⁴⁵ notify information on oil pollution⁴⁶ and undertake appropriate monitoring activities. 47 The Agreement also contains provisions on the regional cooperation, in terms of assistance and coordination in response operations, 48 exchange of information⁴⁹ and joint exercises and training⁵⁰ for instance. Even if the decision to adopt a legally binding instrument within the Arctic Council framework is rare enough to be worthy of note, the agreement itself is neither really ambitious nor comprehensive. It focuses only on responses to oil pollution and imposes on States some very light cooperation obligations, which constitute a minimum countries neighbouring a sensitive area should have. It also ignores the knowledge (research on oil behaviour in icy conditions) and technical gaps (current technologies poorly perform in Arctic conditions).

April, 2009, Tromsø, Norway.

- 41. Arctic offshore oil and gas guidelines, 29 April 2009, p.5.
- 42. Fourth Ministerial Conference on the protection of the Arctic environment, 11-12 June 1997, Alta, Norway.
- Eight Ministerial Meeting of the Arctic Council, 15 May 2013, Kiruna, Sweden.
- 44. Article 4-1.
- 45. Article 5.
- 46. Article 6-1.
- 47. Article 7.
- 48. Article 8.
- 49. Article 12.
- 50. Article 13.

Baltic Sea

The Baltic Sea is governed by the Convention on the Protection of the Marine Environment of the Baltic Sea Area, adopted in 1992 and entered into force in January 2000. The Helsinki Commission (HELCOM) is the governing body of the Convention which has 10 Contracting Parties.51 The Convention binds States to "take all appropriate legislative, administrative or other relevant measures to prevent and eliminate pollution",52 including that "resulting from exploration or exploitation of its part of the seabed and the subsoil thereof or from any associated activities thereon".53 The Convention contains an Annex VI on Prevention of Pollution from Offshore Activities composed of 9 "regulations" which particularly binds States to conduct EIA before permitting an activity,54 to regulate the discharge of various substances55 and to ensure operators have contingency plans.⁵⁶

Mediterranean

The Mediterranean Sea is governed by the Convention for the Protection of the Mediterranean Sea against Pollution adopted on 16 February 1976 in Barcelona, Spain. ⁵⁷ The Convention was amended in 1995 and renamed Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean (Scovazzi, 1996). Within this framework, a specific Protocol, namely the Protocol for the Protection of the Mediterranean Sea against Pollution resulting from Exploration and Exploitation of the Continental shelf and the seabed and its Subsoil, was adopted in 1994 and entered into force in March 2011. ⁵⁸

This regional instrument covers the full range of activities concerning exploration and exploitation of resources in the Mediterranean: scientific activities, exploration (e.g. seismological activities, exploration drilling) and exploitation activities (installations establishment, development drilling, recovery/treatment/storage, transportation

- Denmark, Estonia, European Union, Finland, Germany, Latvia, Lithuania, Poland, Russia and Sweden.
- 52. Article 3.
- 53. Article 12.
- 54. Regulation 3.
- 55. Regulations 4 and 5.
- 56. Regulation 7.
- 57. Contracting Parties include the European Union and all the Mediterranean riparian States: Albania, Algeria, Bosnia and Herzegovina, Croatia, Cyprus, Egypt, France, Greece, Israel, Italy, Lebanon, Libya, Malta, Monaco, Morocco, Montenegro, Slovenia, Spain, Syria, Tunisia and Turkey.
- Albania, Cyprus, Libya, Morocco, Syria, Tunisia and the European Union are Contracting Parties to the Protocol.

to shore).59 It also covers all types of installations.60 Regarding the safety of offshore activities, the Protocol states in particular that all activities shall be subjected to the prior written authorisation for exploration or exploitation from the competent authority: "such authority, before granting the authorization, shall be satisfied that the installation has been constructed according to international standards and practice and that the operator has the technical competence and the financial capacity to carry out the activities".61 "Authorisation shall be refused if there are indications that the proposed activities are likely to cause significant adverse effects on the environment that could not be avoided by compliance with the conditions laid down in the authorization". 62 Moreover, the Protocol also covers the liability and compensation side of offshore activities (see Section 3.1.2.1) and includes 7 annexes, dealing with the (i) harmful or noxious substances and materials the disposal of which in the Protocol area is prohibited, (ii) harmful or noxious substances and materials the disposal of which in the Protocol area is subject to special permit, (iii) factors to be considered for the issue of the permits, (iv) EIA, (v) oil and oily mixtures and drilling fluids and cuttings, (vi) safety measures, and (vii) contingency plan. Covering a wide range of issues, the Protocol is recognised as a comprehensive agreement (Rochette, 2012) whose implementation is badly needed.

To that purpose, States decided, during the 17th meeting of the Contracting Parties of the Barcelona Convention, held in Paris, France, in December 2012, to establish a Working Group and prepare a 10-year Action Plan to implement the Protocol. 63 To that end, the Regional Marine Pollution Emergency Response Centre for the Mediterranean Sea (REMPEC) organised the 1st Offshore Protocol Working Group Meeting on 13-14 June 2013, in Malta. 64 A second meeting was held in November 2013 but the Action Plan was not presented during the COP held in December 2013.

59. Article 1d.

North East Atlantic

Adopted in 1992 and entered into force in 1998, the Convention for the Protection of the Marine Environment of the North-East Atlantic (the OSPAR Convention) is the result of the unification, up-date and extension of the 1972 Oslo Convention for the Prevention of Marine Pollution by Dumping from Ships and Aircraft and the 1974 Paris Convention for the Prevention of Marine Pollution from Land-based Sources. According to this Convention, the Contracting Parties⁶⁵ "shall (...) take all possible steps to prevent and eliminate pollution and shall take the necessary measures to protect the maritime area against the adverse effects of human activities so as to safeguard human health and to conserve marine ecosystems and, when practicable, restore marine areas which have been adversely affected".66 To that purpose, a Commission ("the OSPAR Commission") is established by Article 10 of the Convention, with the mandate to adopt legally binding decisions and non-legally binding recommendations and other agreements.

Annex III of the Convention specifically deals with the prevention and elimination of pollution from offshore sources, providing rules on dumping of wastes,67 discharge or emission from offshore sources of substances which may reach and affect the region⁶⁸ or disuse of offshore installations and pipelines.⁶⁹ Adopted in 2010, the Strategy of the OSPAR Commission for the Protection of the Marine Environment of the North-East Atlantic (2010-2020) also sets objectives, guiding principles and strategic directions for offshore oil and gas activities. Against this backdrop, several decisions and recommendations have been adopted by OSPAR Contracting Parties, aimed at regulating the discharges of chemicals and oil, the use of chemicals offshore, the decommissioning of offshore platforms and environmental management systems (Table 1). Following the Deep Water Horizon accident, OSPAR Contracting Parties adopted Recommendation 2010/18 on the prevention of significant acute oil pollution from offshore drilling activities and established the Intersessional Correspondence Group (ICG) DRILLEX to consider drilling in extreme conditions and potential environmental impacts. In 2012, the OSPAR Offshore Industry Committee "endorsed the ICG-DRILLEX

^{60.} Article 1f.

^{61.} Article 4-1.

^{62.} Article 4-2.

^{63.} Decision IG 20.12 "Action Plan to implement the Protocol of the Barcelona Convention concerning the Protection of the Mediterranean Sea against Pollution Resulting from Exploration and Exploitation of the Continental Shelf and the Seabed and its Subsoil".

^{64.} The meeting documents are available at: http://www.rempec.org/rempecnews.asp?NewsID=260.

^{65.} Belgium, Denmark, the European Union, Finland, France, Germany, Iceland, Ireland, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

^{66.} Article 2-1a.

^{67.} Article 3.

^{68.} Article 4.

^{69.} Article 5.

conclusions that for the time being there is no need for a specific OSPAR measure".⁷⁰

Table 1. OSPAR measures to manage pressures from the offshore oil and gas industry

Discharges of chemicals and oil

Decision 2000/3: Restriction of use and discharges of organic-phase drilling fluids and contaminated cuttings

Recommendation 2006/5: Management of offshore cuttings piles

Recommendation 2001/1: Management of produced water and 15% reduction target for oil discharged with produced water

Use of chemicals offshore

Decision 2000/2: Harmonised Mandatory Control System to manage use and discharges of chemicals offshore

Recommendation 2000/4: Harmonised chemical pre-screening scheme Recommendation 2000/5: Harmonised chemical notification Recommendation 2005/2: Phase out of OSPAR priority chemicals Recommendation 2006/3: Phase out of candidate substances for substitution

Decommissioning

Decision 98/3: Ban of disposal of disused offshore installations

Environmental management

Recommendation 2003/5: Promotion of use and implementation of environmental management systems

Source: http://qsr2010.ospar.org/en/ch07_02.html

Persian Gulf and Oman Sea

The Persian Gulf and Oman Sea (so-called ROPME Sea Area)—comprising the waters of the Kingdom of Bahrain, Islamic Republic of Iran, Republic of Iraq, State of Kuwait, Sultanate of Oman, State of Qatar, Kingdom of Saudi Arabia and the United Arab Emirates—is governed by the Convention for Cooperation on the Protection of the Marine Environment from Pollution, adopted on 24 April 1978 in Kuwait. Due to its strategic position, a Protocol concerning Marine Pollution resulting from Exploration and Exploitation of the Continental Shelf was adopted as early as March 1989 and entered into force on 17 February 1990.

This Protocol covers "any operation conducted in the Protocol Area for the purposes of exploring of oil or natural gas or for the purposes of exploiting those resources, including any treatment before transport to shore and any transport of the same by pipeline to shore. It includes also any work of construction, repair, maintenance, inspection or like operation incidental to the main purpose of exploration or exploitation". It urges States to take "all appropriate measures (...) to prevent, abate and control marine pollution from offshore operations (...) taking into account the best

available and economically feasible technology".72 More particularly, the Protocol requires Contracting Parties to (i) call for submission of an assessment of the potential environmental effects before licensing any offshore operation which could cause significant risks of pollution;73 (ii) ensure that operators survey the sea bed in the vicinity of their installations, and remove any debris resulting from their operations which might interfere with lawful fishing;74 (iii) ensure that every offshore installations is certified by a Certifying Authority75 and (iv) to approve Contingency Plans prepared by operators.⁷⁶ Specific rules are also provided regarding the discharge of oil, oil-based drilling fluids, water-based drilling muds,77 the disposal of garbage into the sea,78 the use of chemicals79 and dismantling of platforms.80 4 guidelines were also adopted on 21 February 1990: (i) Guidelines on requirements for environmental impact surveys and assessments; (ii) Guidelines on the use and storage of chemicals in offshore operations, (iii) Guidelines on the conduct of seismic operations and (v) Guidelines on disposal of drill cuttings on the sea-bed.

This Protocol is therefore a very technical agreement, providing rules on the different phases of offshore exploration and exploitation. However, it does not bind States to systematically conduct EIA and does not include provisions on liability and compensation.

Western, Central and Southern Africa Region

Western and Central Africa is one the most active offshore petroleum fields in the world and is "by far, the world's most active deepwater sector" (Pike, 2013). Biggest players include Nigeria, Angola and Ghana (IEA, 2012; Cresswell, 2012) but almost all the marine waters off Africa's Atlantic coasts are currently divided into blocks open for oil and gas exploration or exploitation. The legal basis of regional environmental cooperation is the Convention for Cooperation in the Protection and Development of the Marine and Coastal Environment of the West and Central African Region adopted in 1981, amended in 2008 and renamed Convention for Cooperation in the Protection,

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^{70.} OSPAR Convention for the Protection of the Marine Environment of the North-East Atlantic, Meeting of the OSPAR Commission (OSPAR), Bonn, 25-29 June 2012, §8-2.

^{71.} Article 1-13.

^{72.} Article 2.

^{73.} Article 4-1.

^{74.} Article 5-2.

^{75.} Article 6.76. Article 8-1.

^{77.} Article 9.

^{78.} Article 10.

^{79.} Article 11.

^{80.} Article 13.

Management and Development of the Marine and Coastal Environment of the Atlantic Coast of the West, Central and Southern Africa Region (the Abidjan Convention). A Protocol Concerning Cooperation in Combating Pollution in Cases of Emergency was adopted the same year, and both legal instruments entered into force in 1984. Moreover, a Protocol concerning the Cooperation in the Protection and Development of the Marine and Coastal Environment from Land-Based Sources and the Activities (LBSA) in the Western, Central and Southern Africa Region was adopted in June 2012. Like in the Western Indian Ocean (Rochette and Billé, 2012b), the region went through a period during which implementation of the Convention and the protocol were held up by a number of factors, most of them related to a lack of adequate funding and political commitment. Now that the regional system has been revitalised and that several reports have pointed out the threats caused by offshore industries on the regional marine environment (WWF, 2011; Kloff and Wicks, 2005; Panel scientifique indépendant sur les activités pétrolières et gazières en République islamique de Mauritanie, 2009), strengthening the regional regulation of offshore oil and gas exploration and exploitation is on the agenda of the Abidjan Convention Contracting Parties.81

During the 9th COP held in Accra, Ghana, from March 28th to April 1st 2010, Contracting Parties made important steps to address oil spills, including those related to offshore platforms. The 1981 Protocol Concerning Cooperation in Combating pollution in Cases of Emergency in the Western and Central African region was first amended, and Parties decided to create a Regional Centre for Cooperation in Case of Emergency.⁸² Moreover, a Regional Contingency Plan was adopted in order to organise a prompt and effective

response to oil spills affecting or likely to affect the region. 83 Last, Contracting Parties committed to "build national capacity in oil and gas development to manage the sector, elaborate and adopt appropriate national policies, conduct strategic environmental assessments and social/environmental impact assessments (...), enact national legislation to address liability, compensation, safety and security-related matters for offshore platforms". 84

Contracting Parties went further during the 10th COP organised in Pointe Noire, Republic of Congo, from 12 to 16 November 2012, by adopting Decision CP.10/8 "Environmental standards for the offshore exploration and exploitation activities of mining and mineral resources off the coasts of the States Parties". While calling the Contracting Parties "to exchange information, experiences and expertise in the field of security and maritime safety standards", this decision urges States to "implement initiatives involving the relevant international organisations, such as IMO, UNEP, regional and sub-regional organisations and the extractive industries to develop regional environmental standards" for the exploration and exploitation of mining and minerals activities companies off the coasts of the States Parties". This decision demonstrates the Contracting Parties' political will to better control the development of an activity which has significant impacts on marine biodiversity in the region (Kloff and Wicks, 2005). A first Experts Meeting on regional environmental standards for offshore exploration and exploitation in the West, Central and Southern Africa Region was held in Abidjan, Cote d'Ivoire, from 23 to 24 September 2013. Decision was made to propose to next COP, to be held in March 2014, to elaborate the regional environmental standards in the form a Protocol to the Abidjan Convention.

81. Angola, Benin, Cameroon, Cape Verde, Congo, Cote d'Ivoire, Democratic Republic of Congo, Equatorial Guinea, Gabon, Gambia, Ghana, Guinea, Guinea-Bissau, Liberia, Mauritania, Namibia, Nigeria, Sao Tome and Principe, Senegal, Sierra Leone and Togo.

Western Indian Ocean

Environmental protection in the Western Indian Ocean is governed by the Convention for the Protection, Management and Development of the Marine and Coastal Environment of the Eastern African Region, adopted in June 1985, amended in March 2010 and now entitled Amended Nairobi Convention for the Protection, Management and Development of the Marine and Coastal Environment of the

^{82.} Article 7 of the amended Protocol concerning cooperation in combating pollution in cases of emergency in the Western and Central African region and Decision CP.9/5 Creation of a regional centre for cooperation in case of emergency. Invitation to tender as well as selection criteria for the accommodation of Center was sent in 2012 to all Contracting Parties. However, bids received from States Parties were incomplete and did not correspond to the instructions such as indicated in the tender. Decision CP.10/11 "Hosting of the emergency coordination center for marine pollution" adopted during the 2012 COP therefore urges States to submit offers to host the centre within the six months.

^{83.} Decision CP.9/6 Adoption of the Regional Contingency Plan.

^{84.} Decision CP 9/3 Protection of the marine and coastal environment from oil spills emanating from offshore and coastal oil exploration and exploitation.

Western Indian Ocean. The Convention geographical area extends from Somalia in the North to South Africa in the South, covering 5 mainland States (Somalia, Kenya, Tanzania, Mozambique, South Africa) and 5 island States (Comoros, France through La Réunion Island, Madagascar, Mauritius, Seychelles). Since production of oil and gas from offshore sources is expected to take off in the coming years (Pike, 2013; Augé, 2012; Mitchell et al., 2012), Contracting Parties specifically addressed offshore oil and gas issue during the 7th COP held in Maputo, Mozambique, in December 2012. Based on Article 8 of the Nairobi Convention—original and amended versions—according to which States "shall take all appropriate measures to prevent, reduce and combat pollution of the Convention area resulting directly or indirectly from exploration and exploitation of the seabed and its subsoil", Decision CP7/8 "Environment management for oil and gas exploration" urges States "to take into account environmental concerns during exploration and production of oil and gas, including establishing contingency plans and mitigation measures to address negative, chronic and accidental impacts on the marine and coastal environment, (...) to facilitate the collection and sharing of information and best practices on the management of environmental impacts of oil and gas exploration and production particularly on transboundary resources (...), to carry out strategic environmental assessments for oil and gas exploration and production in the marine and coastal environment (...). Last, the Decision requests the Secretariat "to facilitate the development of regional guidelines addressing transboundary environmental impacts of oil and gas exploration and production for consideration at the next Conference of Parties".

2.2.2. The European Union Directive on Safety of Offshore Oil and Gas Prospection, Exploration and Production Activities

2.2.2.1. Background and legislative process

Environmental law has been developing very much in reaction to environmental disasters (Beurier, 2010). This is what happened with the recent adoption of the European Union (EU) Directive on Safety of Offshore Oil and Gas Prospection, Exploration and Production Activities (herafter "the Directive"), which was initiated right after the Deepwater Horizon accident.

Immediately after the accident, EU institutions' first reaction was to question whether industry and regulatory "practices [were] adequate in terms of safety and emergency preparedness and

Box 2. Communication from the European Commission to the European Parliament and the Council, Facing the challenge of the safety of offshore oil and gas activities, 12 October 2010: conclusions and next steps

"The review conducted in the aftermath of the Deepwater Horizon accident has shown that offshore oil and gas activities in the EU are partly governed by a heterogeneous health, safety and environmental regime. Such a fragmented regime may not provide an adequate response for the risks posed by the evolution of offshore oil and gas industrial activities. It leaves areas of legal uncertainty with regard to companies' obligations and responsibilities and does not allow using to the full extent opportunities offered by EU agencies and instruments."

response".85 Indeed, there are already some examples of good standards in national regulatory practices relating to offshore oil and gas activities. However, these are inconsistently implemented throughout the Union and no Member State has yet incorporated all of the best regulatory practices in its legislation for preventing major accidents or limiting the consequences for human life, health and the environment. In this context, the European Parliament adopted in October 2010 a Resolution inviting the European Commission to examine "the regulatory regime applicable to oil extraction and exploration and other forms of seabed exploitation in the EU".86 In response to the Parliament, the European Commission published a Communication on 12 October 201087 which pointed out the regulatory weaknesses and gaps of current practices and proposed to adopt a new legislation to strengthen the safety of offshore installations (Box 2).

While some Member States' regulatory regimes feature high levels of accident prevention through strict health, safety and environment protection requirements, further action is needed to ensure the spread of such best practices throughout the EU by a clear state-of-the-art framework at EU level, clarifying EU legislation and filling identified gaps. The EU has every interest to act without delay and ensure that offshore operations in European waters and world-wide comply with the strictest levels of safety, accident prevention and response, without compromise or inconsistency.

^{85.} EU, Communication from the European Commission to the European Parliament and the Council, Facing the challenge of the safety of offshore oil and gas activities, COM/2010/0560 final, p.4.

^{86.} EU, European Parliament Resolution of 7 October 2010 on EU action on oil exploration and extraction in Europe

^{87.} EU, Communication from the European Commission to the European Parliament and the Council, Facing the challenge of the safety of offshore oil and gas activities, COM/2010/0560 final.

The Commission invites the European Parliament and the Council to support the course of action outlined in this Communication and express their views on the specific actions proposed. The Commission will hold further consultations with national regulators and other stakeholders on the scope of the proposed initiatives in view of tabling proposals for concrete legislative and/or non-legislative measures before summer 2011. Any relevant lessons emerging from the inquiries into the Deepwater Horizon accident will be taken into account in the process".

Following an intensive preparatory work and public consultations, the European Commission finally put forward on 27 October 2011 a proposal for a Regulation,88 which aimed at ensuring that "European offshore oil and gas production will respect the world's highest safety, health and environmental standards everywhere in the EU". According to the Commission, the draft Regulation aimed to provide clear rules that cover the whole lifecycle of all exploration and production activities from design to the final removal of an oil or gas installations. The Regulation was chosen by the Commission because of its immediate and direct application in national legal systems and for its clarity.89 However, both the European Parliament and the Council objected to this choice and preferred to regulate offshore safety through a Directive, very much for political (sovereignty concerns expressed by the United Kingdom) and other reasons related to the nature of those safety measures they proposed, leaving thus some margin of maneuver to Member States for implementation. The choice of a Directive instead of a Regulation has particular consequences in terms of timing for its implementation. Firstly, the Directive provides for a two-year period for transposition. Secondly, in relation to existing installations, Member States can apply national transposing measures at a later stage, though no later than by 19 July 2018.

After an informal trilogue among the three EU institutions, a preliminary agreement was reached on 21 February 2013 under the auspices of the Irish Presidency of the EU and the Directive 2013/30/EU of the European Parliament and of the Council on Safety of Offshore Oil and Gas Operations and amending Directive 2004/35/EC was formally adopted on 12 June 2013. Noteworthy that this Offshore Directive has been adopted almost few weeks after the EU accessed

to the Mediterranean Offshore Protocol⁹⁰ (see Section 2.2.1.2).

2.2.2.2. Content of the Offshore Directive

The Offshore Directive aims at reducing the occurrence of major accidents related to offshore oil and gas operations and at limiting their consequences. Based on Article 191 of the Treaty on the functioning of the EU (TFEU) related to environment protection, it complements the Integrated Marine Strategy Framework Directive N°2008/56/ EC, which provides for the environmental pillar of the EU Integrated Maritime Policy. It is expected that its implementation increases the protection of the marine and coastal environment against pollution. The Directive therefore establishes minimum conditions for safe offshore exploration and exploitation and improves the response mechanisms in the event of a major accident.91 The new regime applies to operations carried out both on fixed and mobile installations and in territorial seas, exclusive economic zones and continental shelves of Member States.92 It covers all "activities associated with an installation or connected infrastructure, including design, planning, construction, operation and decommissioning thereof, relating to exploration and production of oil or gas, but excluding conveyance of oil and gas from one coast to another".93 Although it covers future installations, special provisions are dedicated to existing offshore oil and gas installations in order to improve their safety.94

According to the Directive, offshore oil and gas operations will only be conducted by operators appointed by licensees or licensing authorities. The Directive contains provisions ensuring the independence and objectivity of the competent authority and, to prevent conflicts of interest, binds Member states to ensure a clear separation between regulatory functions relating to offshore safety and environment and regulatory functions relating to economic development, including licensing and revenues management. In addition, the Directive also provides rules for transparency and sharing of information, cooperation between Member states, emergency response plans

^{88.} EU, Proposal for a Regulation of the European Parliament and of the Council on safety of offshore oil and gas prospection, exploration and production activities of 27 October 2011, COM (2011)688 final.

^{89.} Ibid, p.II.

^{90.} Council Decision of 17 December 2012 on the accession of the European Union to the Protocol for the Protection of the Mediterranean Sea against pollution resulting from exploration and exploitation of the continental shelf and the seabed and its subsoil.

^{91.} Ibid, Article 1.

^{92.} EU, Directive of the European parliament and of the council on safety of offshore oil and gas operations, 2013/30/EU, Article 2(2).

^{93.} *Ibid*, Article 1(3).

^{94.} Ibid, (3).

and transboundary emergency preparedness and response.

The Directive applies without prejudice to other EU legislation, in particular on safety and health of workers,95 public information and participation96 and most importantly Directive 94/22/ EC relating to the licensing requirements for the prospection, exploration and production of hydrocarbons, though it complements the latter. When examining the technical and financial capability of the licensee, the licensing authority thoroughly also examines its capability for ensuring continued safe and effective operations under all foreseeable conditions. When assessing the financial capability of entities applying for a license pursuant to Directive 94/22/EC, Member States should verify that such entities have provided appropriate evidence that adequate provisions have been or are to be made to cover liabilities deriving from major accidents under the Offshore Directive.

Beyond licensing requirements complementing those laid down by Directive 94/22/EC, the promotion of safety during offshore oil and gas operations through minimum requirements is at the very heart of the Directive, in particular with regard to the following:

- In order to make suitable arrangements for major accident prevention, operators and owners should comprehensively and systematically identify all major accident scenarios relating to all hazardous activities that may be carried out on that installation, including impacts on the environment arising from a major accident;
- The risk assessments and arrangements for major accident prevention should be clearly described and compiled in the report on major hazards, which should be complementary to the safety and health document referred to in Directive 92/91/EEC on safety and health of workers. The report of major hazards⁹⁷ must comprise several components such as the corporate major accident prevention policy, 98 the safety and environmental management system, 99 a design notification, 100 a scheme of independent

- verification,¹⁰¹ an internal emergency response plan¹⁰² and a notification of well operation if necessary.¹⁰³ The report on major hazards should, *inter alia*, take into account risks to the environment, including the impact of climatic conditions and climate change on the long term resilience of the installations. Most importantly, no installation should be operated in offshore waters of Member States unless the competent authority has accepted the report on major hazards submitted by the operator or owner.
- Well operations should be undertaken only by an installation which is technically capable of controlling all the foreseeable hazards at the well location, and in respect of which a report on major hazards has been accepted. In addition, the operator should prepare a detailed design plan and an operating plan pertinent to the particular circumstances and hazards of each well operation, to be reviewed by an independent expert.
- The implementation of the best practices by the operators and owners requires a scheme of independent verification of safety and environmental critical elements throughout the lifecycle of the installation, including, in the case of production installations, the design stage.

If a major accident occurs, or may be about to occur, operators should notify Member States without delay so that they can initiate a response as appropriate. Therefore, operators should include in the notification suitable and sufficient particulars concerning the location, magnitude and nature of the actual or imminent major accident, their own response, and the worst case escalation scenario including transboundary potential. Emergency response and contingency planning for major accidents should be made more effective by systematic and planned cooperation between Member States and between Member States and the oil and gas industry, as well as by sharing compatible emergency response assets including expertise. Cooperation between Member States and third countries is also encouraged due to the risks of transboundary damages. Where appropriate, responses and planning should also make use of the existing resources and assistance available from within the EU, in particular through the European Maritime Safety Agency and the Union Civil Protection Mechanism. Member States should also be allowed to request additional assistance from the Agency through

^{95.} Directive 89/391/EEC and Directive 92/91/EEC.

^{96.} Directive 2003/4/EC and Directive 2003/35/EC.

^{97.} The report of major hazards contains, among others, a description of the installation, an identification of all the major hazards and their consequences, control measures, an assessment of oil spill response effectiveness, a description of equipments and arrangements to ensure safety (*Ibid*, Articles 12, 13).

^{98.} Ibid, Article 19.

^{99.} Ibid.

^{100.} Ibid, Annex 1.

^{101.} Ibid, Article 17.

^{102.} Ibid, Articles 14, 28.

^{103.} Ibid, Article 15.

the Union Civil Protection Mechanism, if need be. Last, some provisions of the Directive directly refer to the complex subject of liability (Section 3.1.2.2).

2.2.2.3. Conclusion: a missed opportunity

Different opinions were expressed when the Directive was adopted. In the NGO community, Greenpeace greeted the initiative, though with some reserves regarding compensation, 104 whereas Oceana pointed out the "political concessions [made] to protect oil industry and national interests". 105" While strong political wills were expressed at the beginning of the legislative process to strengthen offshore operations regulation in a strict manner, 106 one may consider that, from a legal point of view, the Directive neither really constrains industry practices nor really uses the EU dimension to level the playing field and enhance environmental cooperation.

Firstly, some gaps can be found concerning the required safety measures. For instance, although the Directive focuses very much on licensing, it does not provide for EU minimum requirements on dismantling, which requires specific procedures to be applied (Ekins *et al.*, 2006). It also provides for minimum requirements though leaving a great room for maneuver to the Member States for their interpretation and implementation, entailing thus a risk of disparities among Member States. Furthermore, there are no control and enforcement mechanisms at the EU level.

More importantly, the Directive contains no rules on liability and compensation, with the exception of few requirements at the licensing stage (see Section 3.1.2.2). Given the financial implications, e.g. insurance costs and, if any damage occurs, compensation costs, an adequate liability regime would have significantly promoted safety and, as a result, prevented accidents to occur. This is why some observers regretted that the Offshore Directive was a missed opportunity. ¹⁰⁷

2.3. Conclusion

Past and recent attempts aimed at elaborating an international instrument on the safety of offshore drilling activities all failed. As of today, the international community clearly seems unable to reach an agreement on the need for such an instrument, the most recent and symbolic example being the concretisation of the proposal for an international convention formulated within the G2o framework in a simple website. However, gaps in the global legal framework progressively led to the development of regional instruments, mainly binding. The need to protect the marine environment from offshore oil and gas activities is proclaimed in most regional seas programmes, through the framework Conventions or/and the Action Plans. In the same manner, protocols dealing with the cooperation in case of emergency generally include pollution from offshore installations in their scopes. Moreover, some regional seas have adopted specific agreements regulating offshore activities. However, the above analysis demonstrates that these regional initiatives are highly fragmented. Indeed:

- (i) Regional agreements have contrasted levels of comprehensiveness, some being more comprehensive (in the ROPME Sea Area, the Mediterranean or the North-East Atlantic) than others (in the Arctic for instance);
- (ii) Regional agreements have heterogeneous legal scopes: protocols are binding by nature while guidelines (in the Arctic, the Western Indian Ocean) or recommendations (in the North-East Atlantic) are soft law instruments;
- (iii) Regional agreements have varied levels of implementation: some have been adopted several years ago (in the ROPME Sea Area or North-East Atlantic) but others just entered into force (in the Mediterranean) or still have to be elaborated (in Western, Central and Southern Africa and the Western Indian Ocean).
- (iv) There is no coordination and/or sharing of experiences between the different regions involved in offshore drilling regulation.

^{104.} Greenpeace, "Offshore Safety Directive agreed", Neweurope online, 21 February 2013.

^{105.} Oceana, "EU Parliament misses opportunity, adopts weak offshore drillings safety directive", Press release, 21 May 2013.

^{106.} EU, Communication from the European Commission to the European Parliament and the Council, "Facing the challenge of the safety of offshore oil and gas activities", COM/2010/0560 final, p.4.

^{107.} Europe Écologie Les Verts, Forages offshore: une occasion manquée pour la sûreté des plateformes pétrolières et gazières européennes, 21 mai 2013. It is however worth noting that Article 27-2 of the Mediterranean Offshore Protocol contains provisions on liability which are binding for the parties to the Protocol, including the European Union.

3. LIABILITY AND COMPENSATION FOR OIL POLLUTION DAMAGE RESULTING FROM OFFSHORE OIL AND GAS EXPLORATION AND EXPLOITATION

When I was young I thought that money was the most important thing in life; now that I am old I know that it is.

Oscar Wilde

This section analyses the international and regional rules regulating liability and compensation and the discussion which were reopened in 2010 at IMO for the elaboration of specific international agreement.

3.1. Rules regulating liability and compensation for pollution damage resulting from offshore drilling activities

3.1.1. General rules of international public

Legally speaking, liability means financial and legal responsibility for someone's acts or omissions. The main purpose of any liability regime is therefore to compensate victims claiming they have suffered a loss or a prejudice when a damage occurs. International law provides two kinds of liabilities: (i) the fault-based liability whose triggering element is a fault or negligence, and (ii) the strict liability which makes a person legally responsible regardless of culpability or any fault. Looking at the many accidents and related damages they have caused, offshore oil and gas operations do present significant risks for people, activities and the environment. Therefore, it is important to determine the liability regime which should apply to such activities.

In international law, there are very few provisions directly addressing liability in relation to offshore drilling activities. Indeed, Article 235 of UNCLOS calls upon States to seek for enhanced cooperation in order to develop robust liability mechanisms but no regime has been developed so far despite an ambitious attempt to create a detailed liability regime for offshore operations in 1977 with the Convention on Civil Liability for Oil Pollution Damage (CLEE) which never entered into force. Furthermore, the Brussels Civil Liability Convention for Oil Pollution Damage and the Basel Protocol on Liability and Compensation for Damage Resulting from Transboundary Movements of Hazardous Wastes do not cover pollution risks or environmental damages caused by offshore oil and gas operations.

Customary international law principles may apply, in particular with regard to State liability. A fundamental principle of international law provides that each wrongful act of a State entails its responsibility and requires that losses from any resulting damage are compensated. 108 The International Court of Justice (ICJ), which set forth this principle in 1928,109 applied it to environmental damages in the Fonderie du Trail110 and the Gabcikovo-Nagymaros cases." State liability is based on a fault defined as a "wrongful act"112 which is the breach of an international obligation, including customary rules. Hence, breach of the "prevention"113 principle or "disrespect of the non-harmful use of the environment" rule114 are faults which involve State liability. In practice, few liability cases rely on a direct fault caused by a State, with notable exceptions such as the Aerial Herbicide Spraying case. IIS States are more likely to be recognised as liable when they breach positive obligations like the prevention of acts or facts, including damages caused by activities under their jurisdiction. Any liability of offshore platforms operators would have to be brought before a Court or other dispute settlement procedures, such as arbitration, where victims can claim compensation. The International Tribunal for the Law of the Sea (ITLOS) jurisdiction seems unsuited, in view of its statute. Before the ICJ, only State's liability can be addressed, not operators' liability, provided that the States involved have recognised the competence of the Court. When an international obligation is breached, claims for compensation for damage caused by offshore activities may be brought, but challenges persist due to the specificities of environmental pollution. Victims must prove the fault that can be channeled towards the State, and the causal link between the State's fault and the damage. Finally, in case of environmental damage, restitutio in integrum cannot work. Hence, neither the ICJ nor the ITLOS are perfectly adapted for claims about damage resulting from offshore platforms accidents.

^{108.} International Law Commission, Articles on the Responsibility of States for Internationally Wrongful Acts, 2001, Article 1.

^{109.} ICJ, Chorzow Factory Case, 1928.

^{110.} Fonderie du Trail, 1941.

III. ICJ, Case concerning the Gabcikovo-Nagymaros Project, 1997, §149 sqq.

^{112.} ILC, Chorzow Factory Case, 1928.

II3. ICJ, Case concerning the Gabcikovo-Nagymaros Project, 1997.

^{114.} Ibid 6.

II5. ICJ, Aerial Herbicide Spraying (Ecuador/Colombia), 2010.

3.1.2. Regional agreements on liability and compensation

3.1.2.1. The Mediterranean

Although modestly, the Protocol for the Protection of the Mediterranean Sea Against Pollution Resulting from Exploration and Exploitation of the Continental Shelf and the Seabed and its Subsoil (see Section 2.2.1.2) covers the liability and compensation side of offshore activities. In particular, the Protocol binds States "to cooperate as soon as possible in formulating and adopting appropriate rules and procedures for the determination of liability and compensation for damage resulting from the activities dealt with in this Protocol".116 In the meantime, States "shall take all measures necessary to ensure that liability for damage caused by activities is imposed on operators, and they shall be required to pay prompt and adequate compensation" and "take all measures necessary to ensure that operators shall have and maintain insurance cover or other financial security of such type and under such terms as the Contracting Party shall specify in order to ensure compensation for damages caused by the activities covered by this Protocol".117 In this context, Guidelines for the Determination of Liability and Compensation for Damage Resulting from Pollution of the Marine Environment in the Mediterranean Sea Area (Scovazzi, 2009) were adopted on 18 January 2008 at the 15th ordinary meeting of the Parties to the Barcelona Convention. 118 However interesting and relevant these Guidelines are, they are non-binding documents.

3.1.2.2. The European Union

The Offshore Directive (see Section 2.2.2) contains provisions on liability. First, the definition of damage of water according to the Environmental Liability Directive 2004/35/EC¹¹⁹ has been amended to include damages occurred in the exclusive economic zones.¹²⁰ Before the Offshore

116. Article 27-1.

Directive was adopted, water damages were limited to territorial waters. This extension of the geographical scope of the Environmental Liability Directive allows Member States competent authorities to take more prevention or remediation measures against environmental risks or damages caused by more distant offshore installations. Furthermore, although the Commission plans to study measures to promote a robust liability regime at EU level in the coming years (Bio Intelligence Service et al., 2012), the Offshore Directive points at the entire liability of oil and gas companies if an accident occurs, in as far as Member States shall ensure that the licensee is financially liable for the prevention and remediation of environmental damage as defined in the Environmental Liability Directive.121 In addition, financial compensation is referred to in the Offshore Directive, by requiring from Member States to ensure a "prompt and adequate handling of compensation claims including in respect of compensation payments for transboundary incidents". 122 However, compensation mechanisms remain so far the competence of Member States and, in case of damage, an issue to be addressed before national courts on the basis of national rules and principles, which lead to potential incoherencies across Europe.

3.1.3. A private regional compensation regime: the offshore pollution liability agreement

The Offshore pollution liability (OPOL) agreement is a regional private liability scheme which provides reimbursement mechanisms for claims in order to compensate damages or reimburse remedial measures taken by public authorities after an oil discharge from an offshore installation.¹²³ Originally set up as an interim measure to fill a legal gap in the United Kingdom before the ratification of the CLEE,¹²⁴ the OPOL Agreement was adopted on 4 September 1974 and came into force on 1 May 1975.¹²⁵ As the process of the CLEE ratification failed, the Agreement became definitive and unlimited. Proposed as "a reflection of the responsible attitude of the offshore oil industry to ensure that harm is not caused by its operations,

^{117.} Article 27-2.

^{118.} UNEP / MAP, Report of the 15th ordinary meeting of the Contracting Parties to the Convention for the protection of the marine environment and the coastal region of the Mediterranean and its Protocols, Almeria (Spain), 15-18 January 2008, UNEP(DEPI)/MED IG.17/10, Decision IG 17/4.

^{119.} EU, Directive on environmental liability with regard to the prevention and remedying of environmental damage, 2004/35/CE, Article 2.

^{120.} EU, Directive of the European parliament and of the council on safety of offshore oil and gas operations, 2013/30/EU, Article 38; EU, Marine Strategy Framework Directive, 2008/56/CE.

^{121.} EU, Directive of the European parliament and of the council on safety of offshore oil and gas operations, 2013/D30/EU, Article 7.

^{122.} Ibid, Article 4 (3).

^{123.} OPOL, Offshore pollution liability agreement, Preamble.

^{124.} OPOL website, Home, available on http://www.opol. org.uk/index.htm

OPOL, Offshore pollution liability agreement, Clause XI.

and [a demonstration] that the industry can properly organise its affairs",126 the OPOL Agreement is a contractual agreement among operators of offshore facilities—among which Shell U.K. Limited, Total Oil Marine Limited, BP Petroleum Development Limited or Amoco Exploration Company-127 located in ten States and territories: United Kingdom of Great Britain and Northern Ireland, Denmark, the Federal Republic of Germany, France, Greenland, the Republic of Ireland, the Netherlands, Norway, the Isle of Man and the Faroe Islands. 128 The OPOL scheme is administered by the OPOL Association Limited which has been set up as a company limited by guarantee to be responsible for the OPOL administration and relations between the parties. At present, OPOL seems to be fully and solidly settled as a part of the international compensation background, and lays on five main points which are analysed below.

First of all, OPOL provides for the operator's strict liability regime,129 which means there is no need for the claimant to provide any proof or to argue any fault on the side of the operator: strict liability only relies on the objective fact of harm and "avoid argument about whether some other criterion of responsibility, such as negligence or other fault, has occurred before someone is required to pay compensation" (Rares, 2011). It also allows identifying immediately the person liable so that victims know against whom to turn to for compensation. As a balance, the strict liability regime imposes limits on the amount for which the responsible party is liable. Strict liability is a legal regime commonly used for environmental protection because of the very special features of environmental damages, which may have multiple and diffuse causes. It allows a direct application of the "polluter pays" principle. However, it must be noted that several exceptions to the strict liability principle are foreseen by the OPOL Agreement: the operator is indeed strictly liable unless he can establish that the incident resulted from an act of war, was intentionally caused by a third party or the claimant, or was the result of an act of State.130 This strict liability principle encourages the operator to plan strong prevention mechanisms and to take immediate remedial measures if an incident occurs, which are part of the OPOL objectives.¹³¹ However, there is a question marked about damages covered by the OPOL agreement: OPOL promotes compensation for pollution damage which is defined as "direct loss or damage (other than loss of or damage to any Offshore Facility involved) by contamination which results from discharge of oil". 132 This definition, wide open and vague, could include the ecological damage which is the damage caused to the marine environment without human interest directly concerned. But, the OPOL agreement is a private instrument, and there is no legal supervision through enforcement mechanisms over the definition of damage. Hence, ecological damage may be left aside, especially because OPOL promotes compensation for persons who sustain pollution damage and for public authorities.

Secondly, one of the proclaimed aims of the OPOL scheme is to ensure that claims are met. 133 For that purpose, OPOL provides two mechanisms. On one hand, the OPOL Association makes sure that Parties contracting to OPOL have sufficient financial resources to meet their obligations. Therefore, they have to produce "evidence of insurance or self-insurance or other satisfactory means". 134 On the other hand, Contracting Parties to OPOL agree to contribute jointly to the payment of claims if a party cannot comply with its obligations. 135 Contributions by the remaining parties are pro-rated depending on the number of offshore facilities of each remaining party.¹³⁶ This private mechanism establishes a strong guarantee for the claimant and ensures that compensation will be paid.

Thirdly, OPOL provides for a cap on the amount of compensation that may be claimed, fixed at USD 250 million per incident, with half covering damage claims, and half to cover operational measures for remediation, including remediation measures taken by the operator himself. Hence, operators shall compensate damages or reimburse public measures up to a maximum set up by themselves. If this has been regularly increased since the start of OPOL, ¹³⁷ some believe that the proposed

^{126.} OPOL, Information for prospective members, p.i, available at http://www.opol.org.uk/downloads/ opol-memberinfo-jani3.pdf

^{127.} OPOL, Offshore pollution liability agreement, p.12.

^{128.} According to its clause 1-8, the Mediterranean and the Baltic seas are excluded from the geographical coverage of the Agreement.

^{129.} OPOL, Guidelines for claimants, p.1.

^{130.} OPOL, Offshore pollution liability agreement, Clause IV.B.

^{131.} http://www.opol.org.uk/about.htm

^{132.} OPOL, Offshore pollution liability agreement, Clause I.

^{133.} http://www.opol.org.uk/about.htm

^{134.} http://www.opol.org.uk/about.htm

^{135.} OPOL, Offshore pollution liability agreement, Clause III.2.

^{136.} OPOL, Articles of association of the offshore pollution liability association limited, Appendix 3.

^{137.} For instance, at the OPOL beginning, the maximum

maximum amount is not sufficient (House of Commons, 2011), in particular when looking at the huge costs entailed by the remediation of the Deepwater Horizon accident. Indeed, if damages related to minor incidents may be covered by the OPOL scheme, ¹³⁸ it is more likely that some others may not given the consequences of any significant oil leaks. ¹³⁹

Fourthly, claims under OPOL are settled through arbitration, in order to "avoid complicated jurisdictional problems". 140 Indeed, according to the Clause IX of the OPOL agreement, disputes shall be settled "under the Rules of Arbitration of the International Chamber of Commerce by one or more arbitrators". 141 This exclusive choice of arbitration may be seen as preferable for both sides, the operator and the claimant. On one hand, with regard to the huge lateness of the final compensation payments after the Amoco Cadiz and Exxon Valdez accidents (respectively 18 and 21 years after the accidents), arbitration under OPOL provides for a faster dispute settlement mechanism. All the more that an arbitration award is final and binding, i.e. there is no appeal and therefore no delay for getting compensation. Furthermore, arbitration may, in some cases, be cheaper than a court settlement. On the other hand, operators do have a strong preference for arbitration because the outcome is not made available to the public and they have therefore no reputational consequences. However, if claims are not totally filled regarding to the maximum liability amount under OPOL, claimants can ask for more through traditional dispute settlement mechanisms, before a judge.142

Finally, OPOL is currently considered as a private mechanism that operators decide to sign on a voluntary basis. However, some governments consider the OPOL adhesion as a licensing requirement. Hence, in the United Kingdom, the Department of Energy and Climate Change does not issue a license to an oil or gas offshore company unless the operator can demonstrate it has adhered to the OPOL agreement.¹⁴³ Furthermore, an OPOL clause

is included in all Joint Operating Agreement.¹⁴⁴ Thus, if this voluntary scheme may be seen as some kind of weak auto-regulation instrument (House of Commons, 2011), its inclusion in the licensing process in some States, as a bottom-up effect, can be seen as a complementary instrument providing for compensation in case of damages, notwithstanding the abovementioned remarks on the low level of compensation.

In conclusion, OPOL's main weaknesses are its limited geographical coverage and the liability cap at USD 250 million. As the Deepwater Horizon accident illustrates, "oil pollution from fixed platform can be even more costly, and as internationally important, as that from tankers" (Smith, 2011): this cap therefore pales "in comparison with the USD 20 billion relief fund which BP has agreed to finance" (Smith, 2011). Furthermore, a recent report underlines that OPOL is also "severely limited by restrictive terms, absence of independent oversight, and lack of enforceability" (Client Earth, 2011).

3.1.4. Conclusion

As demonstrated, there are currently no global rules regulating liability and compensation for pollution damage resulting from offshore drilling activities. No international agreement has been adopted so far and the regional agreements adopted are either non-binding (in the Mediterranean) or limited (in the European Union). Last, the OPOL, a private regime, is also limited in its geographical coverage and capped at a rather low level with regard to the compensation of damages.

3.2. Recent discussions on an international regime on liability and compensation for oil pollution damage resulting from offshore oil and gas exploration and exploitation activities

Born following a proposal from the Indonesian delegation (3.2.1), the discussions at IMO on the development of an international treaty on liability and compensation are currently at a standstill (3.2.2).

3.2.1. The Indonesian proposal at the International Maritime Organisation

The issue of liability and compensation for oil pollution damage resulting from offshore oil exploration and exploitation was brought to the attention of IMO in March 2010 at the

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liability amount was USD 25 million.

^{138.} For instance: Cardiff Crown Court, Environment Agency vs Milford Haven Port Authority and Andrews, 15 January 1999.

^{139.} The Exxon Valdez accident, for instance.

^{140.} http://www.opol.org.uk/about.htm

^{141.} OPOL, Offshore pollution liability agreement, Clause IX

^{142.} OPOL, Guidelines for claimants, p.1.

^{143.} UK government, Oil and gas: petroleum licensing guidance, Policy, available on: https://www.gov.uk/oil-and-gas-petroleum-licensing-guidance#criteria-to-become-a-licensee.

^{144.} http://www.opol.org.uk/about.htm

60th session of the Marine Environment Protection Committee (MEPC). The Indonesian delegation made a statement regarding an accident at the Montara offshore oil platform located in Australian waters, resulting in a significant release of oil into the Timor Sea. As liability and compensation issues are generally dealt with by the Legal Committee, the MEPC agreed that this matter be discussed within the Legal Committee. 145 Accordingly, the Indonesian delegation submitted a proposal in this regard to the 97th session of the Legal Committee, which met in September 2010.146 The Montara platform, which was located about 250 km off the north-west coast of Australia, blew out during the drilling of a new well. According to Indonesia, the oil slick damaged the marine environment in Indonesian waters and caused socio-economic damage to coastal communities whose livelihoods depend on the sea and its living resources. While the company does carry appropriate insurance, no payout has yet been made due in particular to a dispute as to the alleged extent of the damage. The wider concern of Indonesia was that, while such companies generally do carry insurance, it is usually determined in accordance with the regulatory limits set by national bodies which regulate offshore drilling in the company country and may be, in certain cases, present in regional agreements. However, the amount of such insurance may be limited and may vary according to national law. What is missing, according to the Indonesian delegation, is a uniform international standard which could apply to all incidents of this nature. Indonesia therefore invited the Legal Committee to include this item on its work agenda and to consider the possibility of establishing an international regime for liability and compensation for oil pollution damage resulting from offshore oil exploration and exploitation activities. 147

3.2.2. Current status of the discussion

The Indonesian proposal has, to date, been considered at four successive sessions of the Legal Committee and during an informal intersessional consultative group led by Indonesia.¹⁴⁸ The debate

 IMO, Report of the Marine Environment Protection Committee on its sixtieth session, MEPC 60/22, 12 April 2010. has revolved around two main issues, one procedural and the other substantive.

Regarding the procedure, it is important to recall that in the past, each Committee was able to determine for itself whether to include a new item on its work agenda. Today however, the IMO Council requires that all proposed new agenda items fit into the IMO Strategic Plan developed for each biennium. However, the Indonesian proposal does not fit into the current Strategic Plan and any amendment of the Plan would therefore require the Council's agreement.¹⁴⁹

As far as the substantive issue is concerned, a wide range of views was expressed during the Committee meetings, both for and against the Indonesian submission. Arguments in favour of including the item in the Committee's agenda included: (i) it is timely for the organisation to discuss this issue in light of recent accidents; (ii) the Committee should not wait for another serious incident to occur before acting; (iii) IMO is the only reliable and appropriate forum to address the issue due its characteristics, experience and expertise as a UN specialised agency; (iv) incidents involving transboundary pollution damage from offshore platforms might occur in any part of the world and not every country is able to tackle the problem on its own—accordingly, international regulation is necessary; (v) oil pollution knows no borders and it is urgent to establish a mechanism to compensate victims. 150 On the other side, arguments against the Indonesian proposal, or expressing caution, were the following: (i) according to UNCLOS, IMO's competence relating to offshore platforms is limited to their impacts on maritime navigation; (ii) Article 1 of the IMO Convention confines the Organisation's pollution prevention activities to vessel-source pollution; (iii) the proposal to amend the Strategic Plan does not clarify which authority would regulate and control the offshore oil exploration activities in order to ensure the necessary effectiveness to a system based on the liability of operators; (iv) IMO cannot duplicate, for the offshore oil sector, the liability rules applicable to oil leaks caused by ships; (v) offshore oil exploration activities only exceptionally have an international impact; and (vi) the issue of transboundary pollution damage arising from

^{146.} IMO, Report of the Legal Committee on its ninety-seventh session, LEG 97/15, I December 2010.

^{147.} IMO, Legal Committee 97th session, Proposal to add a new work programme item to address liability and compensation for oil pollution damage resulting from offshore oil exploration and exploitation - Submitted by Indonesia, LEG 97/14/1, 10 September 2010.

^{148.} Indonesia organised in Bali two international workshops on liability and compensation regime for

transboundary oil damage resulting from offshore exploration and exploitation activities, the first one in September 2011 and the second one in November 2012.

^{149.} IMO, Report of the Legal Committee on its ninety-seventh session, LEG 97/15, 1 December 2010, §14.6.

^{150.} IMO, Report of the Legal Committee on its ninetyseventh session, LEG 97/15, I December 2010, §14.7; IMO, Report of the Legal Committee on its ninety eighth session, LEG 98/14, 18 April 2011, §13.4.

offshore oil activities would be better addressed through bilateral or regional agreements.¹⁵¹

Finally, during its 99th Session held in April 2012 and after in-depth discussion focusing on the IMO competence,152 the IMO Legal Committee "agreed to inform the Council that it wished to analyse further the liability and compensation issues connected with transboundary pollution damage resulting from offshore oil exploration and exploitation activities, with the aim of developing guidance to assist States interested in pursuing bilateral or regional arrangements, without revising Strategic Direction 7.2"153 of the High-level Action Plan of the Organisation and priorities for the 2012-2013 biennium. 154 The Committee also recognised "that bilateral and regional arrangements were the most appropriate way to address this matter; and that there was no compelling need to develop an international convention on this subject". 155 In other words, the IMO Legal Committee rejected the Indonesian proposal to develop an international regime for liability and compensation for oil pollution damage resulting from offshore oil exploration and exploitation activities, considering that this issue should be addressed at regional level. A similar decision was taken during the 100th Legal Committee Meeting, held on 15-19 April 2013 (Box 3).156

151. IMO, Report of the Legal Committee on its ninetyseventh session, LEG 97/15, I December 2010, §14.8; IMO, Report of the Legal Committee on its ninety eighth session, LEG 98/14, I8 April 2011, §13.4.

Box 3. Summary of the discussion held during the 100th Legal Committee Meeting on liability issues from offshore oil exploration and exploitation¹

"The Committee noted information from Indonesia on the outcome of the second International Conference on Liability and Compensation Regime for Transboundary Oil Damage Resulting from Offshore Exploration and Exploitation Activities, held in Bali in November 2012, as well as a submission containing principles for guidance on model bilateral/regional agreements or arrangements on liability and compensation issues connected with transboundary pollution damage from offshore exploration and exploitation activities.

The Committee recalled its previous decision to analyse further the liability and compensation issues connected with transboundary pollution damage resulting from offshore oil exploration and exploitation activities, with the aim of developing guidance to assist States interested in pursuing bilateral or regional arrangements, following the Deepwater Horizon incident in 2010 and the 2009 incident on the Montara offshore oil platform, located in the Australian Exclusive Economic Zone, in which a well blew out, leading to a significant oil spill.

The Committee agreed that assistance should be provided to those States which are in need of guidance for bilateral and multilateral agreements. Member States were invited to send examples of relevant legislation and, in particular, examples of existing bilateral and regional agreements to the Secretariat; and the delegation of Indonesia was encouraged to continue with its work to facilitate further progress within the Committee".

 Source: http://www.imo.org/MediaCentre/ MeetingSummaries/Legal/Pages/LEG-100th-session.aspx

3.3. Conclusion

The Montara accident opportunely reopened the debate on the suitability of the international framework regulating liability and compensation in case of accidents arising from drilling activities. However, as shown by the recent discussions at IMO, there is no political will shared by contracting parties to adopt such framework at multilateral level. Therefore, it seems very unlikely that the international community can quickly reach an agreement on the need to develop such framework and negotiate an international treaty on this issue. The Indonesian delegation appears to be isolated in its endeavour. Reluctant States, Brazil at the helm, did not change their positions despite the discussion held on four occasions within the Legal Committee: putting the ball into the court of regional organisations, they totally reject the idea of a global regulation.

^{152.} IMO, Report of the Legal Committee on its ninety-ninth session, LEG 99/14, 24 April 2012. See also the position paper submitted by Brazil: IMO, Legal Committee, 99th session, Analysis of liability and compensation issues connected with transboundary pollution damage from offshore exploration and exploitation activities, including a re-examination of the proposed revision of Strategic Direction 7.2 - Submitted by Brazil, LEG 99/13/I, 10 February 2012.

^{153.} IMO, Report of the Legal Committee on its ninety-ninth session, LEG 99/14, 24 April 2012, §13.16.

^{154.} IMO, Resolution A.1038(27), High-level action Plan of the Organisation and priorities of the 2012-2013 biennium, 30 November 2011, 27/Res.1038, 20 December 2011.

^{155.} IMO, Report of the Legal Committee on its ninety-ninth session, LEG 99/14, 24 April 2012, §13.17.

^{156.} Source: http://www.imo.org/MediaCentre/Meeting Summaries/Legal/Pages/LEG-100th-session.aspx

4. NEEDS ASSESSMENT AND OPTIONS FOR MOVING FORWARD

To live outside the law, you must be honest. Bob Dylan

In light of the analysis provided in the above developments, this section aims at highlighting the main needs for a better regulation and control of offshore drilling activities and identifying options for moving forwards, both in terms of safety (4.1) and liability and compensation issues (4.2). For each of this topic, it focuses in particular on the best level of intervention and on the principles on which any agreement should be based.

4.1. Expanding and strengthening regional agreements on safety of offshore oil and gas activities

4.1.1. Analysis of the current situation

Analyses demonstrate that national legislations regulating offshore oil and gas activities greatly vary from one country to another. Some national legislations address every stage of the platform's lifecycle—from the exploration phase to the dismantling of the facilities—while others are restricted to the production stage. Some aim at addressing the environmental impacts of offshore exploration and exploitation while others are entirely focused on facilitating the development of offshore activities. Last, because of capacity issues, the implementation of the national regulations also greatly vary from one country to another. Besides, the analysis of the current legal framework on the safety of offshore drilling activities first demonstrates that there currently is a regulatory gap at the international level. Indeed, despite UNCLOS' relevant provisions, no international convention on the safety of offshore drilling activities has been adopted so far, and no discussion is currently on-going to fill this gap. At the same time, the recent years have seen the development of regional initiatives aimed at controlling these activities. However, even if some are promising, these regional initiatives appear to be highly fragmented and insufficient. Indeed, as highlighted in Section 2.3, regional instruments (i) do not have the same level of details, some being more comprehensive than others; (ii) do not have the same legal scope, some being legally binding while others are soft law instruments; (iii) do not have the same level of implementation. Moreover, there are still regions where offshore oil and gas activities are on-going and where no regional instrument has been adopted so far:

that is the case, for instance, in the Wider Caribbean and in Asia (Lyons, 2011a and 2011b). Last, beyond these purely legal issues, it is worth adding that there is a lack of capacity in many developing States which prevents them from effectively addressing this issue. For instance, data on vulnerable ecosystems often lacks, which makes it difficult to take into account the conservation and sustainable use of marine biodiversity when delivering drilling authorisations. More broadly, national administrations often have poor knowledge on offshore industry (Panel scientifique indépendant sur les activités pétrolières et gazières en République islamique de Mauritanie, 2009; Cameron, 2012), this sector being very technical and opaque. This is a considerable obstacle to an effective control of offshore drilling activities.

Against this background, several risks can be highlighted if the legal status quo prevails: (i) a risk of inappropriate, fragmented or inexistent regulations, leading to a protection of the environment at different speeds, including the risk of environmental dumping due to the lack of level playing field; (ii) a risk of non-implementation of national and / or regional agreements if States capacities are not strengthened; (iii) a risk of regulation by private norms only; but, beyond the major companies which have sometimes developed high-level internal norms, through the International Association of Oil and Gas Producers (OGP) in particular, the offshore sector is also composed of small companies which do not pay the same attention to the protection of the environment.

4.1.2. Needs

4.1.2.1. Harmonising national legislations by regional binding agreements

Why regional agreements?

The first reason to support the development of regional agreements is strategic: adopting a global approach for regulating offshore drilling activities seems unrealistic as of today. There is currently a reluctance from the international community to engage in the elaboration of global agreements. Furthermore, in the specific offshore drilling sector and as recently demonstrated by the balance of powers within the G20 and IMO frameworks, many States are opposed to any global agreement and changing leading organization—to engage UNEP promoting and coordination the process for instance—would certainly not give better results in the short and medium terms.

Second, there unquestionably are many advantages in adopting a regional approach to regulate offshore drilling activities:

- (i) The regional approach has proven promising for the conservation and sustainable use of marine biodiversity (Rochette and Chabason, 2011). There are therefore well-established regional frameworks on which States could rely on to better regulate and control the development of offshore drilling activities;
- (ii) The regional scale seems to be appropriate to manage offshore hydrocarbons risks, in particular because of the transboundary nature of oil spills;
- (iii) The regional frameworks offer the opportunity for States to join forces and adopt rules which would not be elaborated by States themselves;
- (iv) Some regions have already developed interesting instruments, e.g. in the Mediterranean, which can inspire other regions.
- (v) Last, what seems to be a crucial condition for success—i.e. strengthening States capacities (Section 4.1.2.2)—could be achieved through regional organisations themselves since capacity building is generally part of their mandates.

Why legally binding agreements?

Guidelines, recommendations, declarations or codes of conduct pile up on the desks of decision-makers, without receiving particular attention. National administrations most often concentrate their work programme on the implementation of international and regional treaties, which pleads for the development of binding agreements. Legally binding is not a panacea, but such effect allows both States and private entities, to look for enforcement and settle disputes, in particular where a damage has occurred.

Which common principles and rules to promote?

Regional instruments should be tailored and take into account the specificity of each region: that is precisely the added-value of the regional approach. At the same time, regional agreements could also be based on a set of common principles and rules, considered as best capable of regulating offshore drilling activities: that would be the best way to avoid having different levels of protection among the different regions. For instance, the following principles and rules could be integrated in all regional agreements regulating offshore activities:

(i) Activities regulated. A regional agreement should first cover the full range of activities dealing with the exploration and exploitation of offshore oil and gas, including (i) the scientific research concerning the resources of the seabed and

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its subsoil, (ii) exploration activities, (iii) exploitation activities. In the same manner, a regional agreement should be applicable for all types of offshore installations, mobile and fixed.

- (ii) **Permitting.** All activities should be subjected to prior authorisation. Before granting the authorisation, the competent national authority should request the operator to, *inter alia*, (i) conduct an environmental impact assessment; (ii) conduct risks assessment; (iii) prepare a contingency plan in case of accident; (iv) prepare plans for removal of installations; (v) demonstrate that installations are certified by a competent entity (certifying authority); (vi) demonstrate its technical and financial capacities (including for potential economic damages: see Section 4.2.2.2) to carry out the activities.
- (iii) **Discharges**. A regional agreement should regulate the discharge of various substances—including produced waters, oil, drilling fluids, water-based drilling muds, chemicals, materials—in order to minimise their harmful effects on the environment.
- (iv) **Independence of authorities**. Contracting Parties should be required to ensure a clear separation between regulatory functions relating to offshore safety and environment and regulatory functions relating to economic development, including licensing and revenues management.
- (v) Protection of the environment. Contracting Parties should take all the necessary measures to prevent, abate, combat and control pollution arising from offshore activities. Before granting any authorisation, they should in particular take into account the ecological sensitivity of the marine area where activities are planned. In this regard, they should in particular prohibit any activities in marine protected areas.
- (vi) Cooperation in case of pollution. Procedures organising the cooperation between neighboring States should be adopted. This could take the form of a Regional Contingency Plan, whose implementation could be coordinated by a Regional Activity Centre.
- (vii) **Public information and participation**. Contracting Parties should adopt mechanisms and procedures to ensure an early and effective public information and participation, as well as transparent reporting mechanisms for accidents investigations and inspections.

4.1.2.2. Building national capacities

However comprehensive and "modern" a regulation may be, it cannot deliver changes if States have no means—e.g. technical, financial, human, etc.—to implement it. As already mentioned in Section 4.1.1, building States' capacities in controlling the offshore industry appears to be a crucial

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challenge. Hence, while developing and strengthening regional agreements, a special emphasis should be simultaneously placed on developing capacity. This could be done through:

- (i) Expanding the mandate of the IMO/IPIE-CA Global initiative. For more than 15 years, IMO and IPIECA have been working to enhance oil spill preparedness and response capacity for marine spills at priority locations around the world. This so-called Global initiative aims to "assist countries in preparing for major oil spills, and encourage and enable ratification and implementation of oil spill related international conventions" (IMO/IPIECA, 2011). To that purpose, several programmes have been implemented in West, Central and Southern Africa, Caspian and Black Seas and South Asian Seas for instance. The Global initiative is however focused on preparedness and response only, not on prevention. Its mandate could therefore be opportunely expanded in order to include this topic for which capacity lacks in many countries.
- (ii) Developing North-South Cooperation. Some States and regional organisations have developed considerable expertise in terms of offshore drilling regulations. Developing the cooperation between these States/organisations and those in need of better capacity could therefore be enhanced. This could be done through:
- The development of twinning agreements between regional organisations. In this regard, the current development of collaborative actions between the OSPAR Commission and the Abidjan Convention Secretariat appears promising and could be expanded to other regions. In the same way, the EU Offshore Authorities Group, recently established to facilitate "the exchange of experiences and expertise between national authorities and the Commission", ¹⁵⁷ could also expand its mandate and collaborate with other States and organisations, beyond the sole EU.
- The transfer of expertise from North to South, supported by national administrations, NGOs, research centres or even the private sector.
- (iii) Developing capacity programmes funded by multilateral and bilateral donors. Among the projects and programmes supported by multilateral and bilateral donors on sustainable development issues, very few are specifically focused on building capacity of national authorities in charge of controlling the safety of offshore drilling activities. This topic could therefore be placed on the agenda of these organisations.

4.1.2.3. Bringing back UNEP to centre stage

The exploitation of offshore oil and gas started many decades ago and the threats facing the environment and marine resources because of drilling activities have never been that important. Even if they failed, initiatives for a better regulation of these activities have been on the agenda of an international organization-IMOand an intergovernmental group, the G2o. As the leading United Nations programme in global environmental governance, UNEP could also have launched initiatives in this sector. However, with the exception of guidelines published in 1997 (UNEP and E&P Forum, 1997), this has not been the case so far. Moreover, the UNEP Regional Seas Programme does not promote and coordinate the development of regional agreements. Despite the urgency, offshore regulation is included neither in UNEP Strategic Directions for the Regional Seas Programmes 2008-2012158 nor in the 2013-2016 ones.¹⁵⁹ However, the support from UNEP to regional initiatives could be valuable in several respects:

- (i) Promoting initiatives in regions where no action has been taken so far;
- (ii) Providing coordination among regional initiatives;
- (iii) Promoting a common set of principles and rules to be integrated in regional agreements (see Section 4.I.2.I);
- (iv) Enhancing the development of twinning agreements between more and less advanced regional seas;
- (v) Supporting the development of capacity building programmes.

4.1.3. Conclusion

The regional approach for the conservation and sustainable use of marine biodiversity has proven advantageous in many respects. In terms of offshore drilling activities, it could also be the level on which actions could be taken. However, making them really efficient implies two major conditions: (i) building national capacity and providing States with assistance to elaborate and implement national and regional regulations; (ii) bringing back UNEP to centre stage for a better coordination

^{157.} EU, Commission Decision of 19 January 2012 on setting up of the European Union Offshore Oil and Gas Authorities Group, Article 2-1.

^{158.} UNEP, Global Strategic Directions for the Regional Seas Programmes 2008 – 2012: Enhancing the role of the Regional Seas Conventions and Action Plans, Ninth Global Meeting of the Regional Seas Conventions and Action Plans Jeddah, Kingdom of Saudi Arabia, 29-31 October 2007, UNEP (DEPI)/RS.9/6.

^{159.} UNEP, Regional Seas Strategic Direction 2013-2016, 15th Global Meeting of the Regional Seas Conventions and Action Plans, Montego Bay, Jamaica, 30th September-1st October 2013, UNEP (DEPI) RS.15/WP.5.RS.

of regional initiatives and promotion of a common set of principles and rules (Table 2).

Table 2. Conditions for success of regional binding agreements on safety of offshore oil and gas activities

	Conditions				
	Building national capacity	Bringing back UNEP to centre stage			
Main function	Providing States with assistance in elaborating and implementing national and regional regulations	Support to and coordination of regional initiatives			
Possible actions	Expanding the mandate of the IMO / IPIECA Global initiative Developing international cooperation Developing capacity programmes funded by multilateral and bilateral donors	Providing coordination among regional initiatives Promoting common set of rules to be integrated in regional agreements Enhancing the development of twinning agreements between North and South regional seas Supporting the development of capacity building programmes			

4.2. Filling the gap in terms of liability and compensation

4.2.1. Analysis of the current situation

As demonstrated in Section 3.1, there are currently no specific rules regulating liability and compensation for pollution damage resulting from offshore drilling activities, except Article 27-2 of the Mediterranean Offshore Protocol. No international agreement has been adopted so far and the regional agreements adopted are either nonbinding (the Mediterranean Guidelines for the Determination of Liability and Compensation for Damage Resulting from Pollution of the Marine Environment in the Mediterranean Sea Area) or limited (in the European Union). As a result, "it is left to national laws to deal with this matter. Such laws vary enormously both in the way that the law itself deals with it and with the way contractual indemnities are interpreted and enforced, or not as the case may be" (Cameron, 2012).

Like for the safety issue, several risks can be highlighted if the legal status quo remains: (i) a risk of legal uncertainty and therefore a risk of political dispute between States; (ii) a risk of partial or non-payment of damages because of the absence of clear rules; (iii) a risk of insolvency: indeed, "the international oil industry is now populated with a combination of big oil companies such as BP and ExxonMobil, medium to large oil companies such as Anadarko and many National Oil Companies, and numerous "new entrant" companies, including service companies, which certainly do not

have the access to capital to pay the kind of large claims which BP faced following the Macondo oil spill" (Cameron, 2012).

4.2.2. Needs

4.2.2.1. Harmonising national legislations by an international convention or regional agreements

Why does a global approach appear to be appropriate?

The question of liability and compensation for pollution damage resulting from offshore drilling activities appears to be global. Establishing global rules would provide many advantages, including providing States and the industry with legal certainty and avoiding different levels of compensation among the regions. Furthermore, it will "provide guidance to nations that are developing their oil industries and ensure that operators in these countries are accountable. It would also be more difficult for industry to resist an international convention as opposed to domestic legislation, particularly if the country involved has modest influence" (Allen, 2011). There is therefore no particular reason why regional initiatives would be more appropriate.

Why does it seem unrealistic in the short term?

Even if many authors considered imperative the elaboration of an international convention on liability and compensation for pollution damage resulting from offshore drilling activities (Cates, 1984; Agyebeng, 2006; Allen, 2011; Bosma, 2012), many States within IMO are reluctant to develop such an agreement, as demonstrated in Section 3.2. The question was reopened by Indonesia three years ago, in 2010, and no significant progress has been made to date. Therefore, given the current balance of powers among States, it seems very unlikely that steps could be made at the global level in the short term. It does mean, however, that this ambition should be abandoned: effort to reach this goal must however be redoubled.

Developing regional agreements as a fallback option?

For the reasons highlighted above, developing regional agreements appears to be one way to move forward and fill the regulatory gaps. Provisions on liability and compensation could therefore be integrated in existing (by amendments) and future regional agreements. This could be done not only within regional seas programmes but also within other regional intergovernmental organisation, such as the Association of Southeast Asian Nations

(ASEAN) for instance,¹⁶⁰ or through alliances of States sharing same interests—the Small Islands Developing States (SIDS) for instance.

4.2.2.2. Common principles and rules to promote

A potential global agreement on liability and compensation, as well as possible regional agreements, could be based on the following principles and rules:

- (i) Type of damage covered. The loss and damage covered by the regime should be as broad as possible and include, beyond economic losses, the ecological damage. "Without defining pollution damage to include these non-economic, abstract claims, [a treaty] regulating oil pollution from fixed platforms will still fail to leave victims fully recovered after massive oil disasters" (Smith, 2011).
- (ii) Strict liability. A future regime should be based on the strict liability of operators, for three main reasons. First, it is the most protective regime: as underlined by Rares (2011), "strict liability would avoid argument about whether some other criterion of responsibility, such as negligence or other fault, has occurred before someone is required to pay compensation. Strict liability offers certainty both in fixing immediate responsibility on an identified person to pay compensation as soon as a casualty occurs and, generally, in identifying what is payable". Second, "the various sources of customary international law reflect the emergence of the doctrine of strict liability and support its application in transnational offshore oil accidents" (Cates, 1984). Third, it is the regime adopted in many national legal systems for abnormally dangerous activity.
- (iii) Joint liability. Liability should be shared between all license holders and their subcontractors. Indeed, "there will always be a risk that insurance, bank guarantees, or protection and indemnity arrangements may fail to respond, due to the insolvency of the person with the obligation to indemnify the controller. Thus, a wider range of persons involved in the ownership operation or control of an off-shore rig should be made responsible" (Rares, 2011).
- (iv) **Financial capacity of operators.** States should ensure that operators have adequate financial capacity to pay possible compensation. To that purpose, compulsory third party insurance should

become a necessary requirement for all companies.

- (v) Liability cap. A cap may be set on the level of compensation, in order to balance the strict liability regime. However, such cap must be set at a level than can ensure the recovery of costs associated with environmental remediation and compensation and losses born by public and private entities, in taking into account lessons learned from the level of costs incurred by recent accidents as specified by activity and/or technology and the sensitivity of the environment and ecosystem services it provides. Furthermore, a compensation fund could be set up to address major disasters that are likely to exceed liability cap.
- (vi) Judicial settlement. First, any regime should allow the widest range of persons and States affected by pollution damage to make claims for compensation. Second, like the Bunker Oil Convention and CLC 1992, jurisdiction should be given to the courts of any State Party in which the damage occurred and judgments given by that courts should be recognised by the courts of other States Parties.

4.2.3. Conclusion

As demonstrated in this section, the regulation of offshore drilling activities must be strengthened: the elaboration of new binding rules is sorely needed. Steps forward could be made at the regional level. In terms of safety, the approach seems to be both realistic and appropriate, providing certain conditions are met (Table 2). In terms of liability and compensation, it is first and foremost the realism that encourages a regional approach (Table 3); it does mean however that efforts to reach a global agreement should not be abandoned.

Table 3. Strengths, weaknesses, opportunities and threats to the development of a global agreement on liability and compensation

compensation					
Strengths Matching a global need. Legal certainty. Universal protection of victims.	Weaknesses Risk of the negotiation process getting stuck. Necessary compromise between high ambitions and sensitivity of issues relating to limitations of liability, cap, etc.				
Opportunities An issue already discussed at IMO. Accidents are likely to multiply.	Threats Discussions at a standstill at IMO. Reluctance from powerful States. Possible lobbying from the private sector to halt the process.				
Conclusion: high risk of failure in the short term but a long term objective worth pursuing.					

^{160.} Report of the second international conference on liability and compensation regime for transboundary oil damage resulting from offshore exploration and exploitation activities, Bali, Indonesia, 21-23 November 2012.

5. CONCLUSION

The adoption of the legislation, no matter how advanced it may be, or the creation of agencies inspired by the world's best model, as well as the allocation of financial resources in equitable amounts, may still fall short of compliance with international obligations in matters of environmental protection if these measures just remain on paper and are not accompanied by additional and concrete measures aimed at preventing the occurrence of damage or ensuring sustainability, with effective reparation if the environmental damage suffered.

Court of Justice of the Economic Community of West African States, SERAP vs Federal Republic of Nigeria, 14 December 2012, §105.

The last decades have been marked by a considerable development of offshore oil and gas activities. Because of an increasing energy demand and technological innovations, drilling activities extended and moved into deep and ultra-deep water areas. This rush to offshore oil and gas exploration and exploitation is not about to end: forecasts show a continuing growth of production in traditional offshore regions and significant development in new areas. One only has to read the industry news to realise the importance of this phenomenon: every day, communiqués announce significant discoveries, successes of exploratory wells and new productions. However, despite the threats posed by these activities on the environment and natural resources, few specific international commitments have been adopted so far. That unquestionably is a specificity of this sector which is not as regulated as other impacting activities. The UNCLOS relevant provisions did not lead to the elaboration of a comprehensive set of international rules, determining the conditions under which drilling activities should be carried out and providing clarity and legal certainty on liability and compensation in case of accidents. The recent accidents on offshore platforms have however demonstrated that the environmental risks of offshore drilling activities can concern all regions in the world and all types of companies, even the big players. It therefore appears timely to fill the gaps and subject offshore drilling to specific rules able to ensure an effective protection of the environment and compensation to victims in case of damages.

In this regard, the report has demonstrated that progresses could mainly come from the regional level for two main reasons. First, as demonstrated by the recent developments within the G20 and IMO, the adoption of global conventions dealing

with safety on the one hand, on liability and compensation on the other hand, seems very unlikely: as of today, the strong opposition from certain States, as well as the absence of a "champion" institution, prevent from achieving it, in the short and medium terms at least. Second and consequently, there are regional organisations on which States can rely to better regulate offshore drilling activities: that is unquestioningly the case of the regional seas programmes but progress could also be made through other regional intergovernmental organisations or through alliances of States sharing same interests – the SIDS for instance. In terms of safety, steps have already been achieved at the regional level. Although fragmented in many ways, several regional initiatives have been developed and others are currently on-going. In the same manner, the regional level also seems the most appropriate leverage to deal with liability and compensation. Although it would match a real need, the elaboration of a global agreement seems very unlikely in the short term. Provisions on liability and compensation could therefore be integrated in current and future regional agreements. Whilst efforts to mobilise champions and convince States to adopt an international convention must be redoubled.

However, let's not be naïve: the regulation of offshore drilling activities is a complex issue and developing agreements, even at the regional level, will face challenges and encounter barriers. In particular, it will certainly be difficult to develop at the same time legal provisions both on safety and liability and compensation. That is a lesson learnt from the Mediterranean and EU experiences. These two issues indeed fall within different fields of expertise and are usually not addressed by the same stakeholders. Moreover, the difficulty to negotiate provisions on liability and compensation—which is highly sensitive because financially impacting—could paralyze the entire process. In regions when the conditions to simultaneously regulate the two issues are not met, a two-step approach could be taken. As a first step, it is crucial to fill the gaps and strengthen the safety of offshore drilling activities by developing regional binding agreements. This is the most urgent need in many regions, e.g. in Western, Central and Southern Africa, the Western Indian Ocean, Asia. The task is not that complex: there are principles and rules, mentioned in this report, that are currently considered as best capable of controlling the offshore drilling activities and minimising the risks on the environment. More difficult will be the development of the necessary accompanying measures the first of which being strengthening national capacities—to ensure an effective implementation

of the regional agreements. In most countries, the resolution of environmental problems related to offshore oil and gas exploration and exploitation will not come from the sole adoption of agreements, even legally binding. That is the reason why a strategic framework is needed in order to create the conditions for success of current and future regional binding agreements. In view of its mandate, UNEP should urgently take the leadership and develop this strategic framework, in particular by providing coordination among regional initiatives, promoting a common set of rules to be integrated in regional agreements, enhancing the development of twinning agreements between more and less advanced regional seas and

supporting the development of capacity building programmes. As a second step, rules dealing with liability and compensation could be developed. To that purpose, the Mediterranean Guidelines can provide some inspiration.

As of today, the offshore sector is certainly the least internationally regulated marine-related industry. By comparison, the shipping sector is subject to dozens of international and regional agreements embracing both the safety and liability and compensation issues. Given the current growth of offshore activities and the recent accidents which highlighted their risks for the environment, it is time to move out of this aberrant situation.

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