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COMMISSION STAFF WORKING DOCUMENT

Liability, Compensation and Financial Security for Offshore Accidents in the European Economic Area

Accompanying the document

Report from the Commission to the European Parliament and the Council on liability, compensation and financial security for offshore oil and gas operations pursuant to Article 39 of Directive 2013/30/EU

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PREFACE

Directive 2013/30/EU (henceforth the Offshore Safety Directive or OSD) entered into force on 18 July 2013. It defines the elements of a comprehensive European Union wide framework for preventing major accidents and limiting their consequences.

However, at the time of drafting, the European Commission, Council and Parliament considered it was not feasible to incorporate into the OSD definitive measures in one critical area of this framework – financial security, compensation, third-party liability and criminal liability for offshore accidents.

The Commission has prepared this document to examine further these inter-related issues. It fulfils the obligations laid out in Article 39 of the OSD, which states:

- 1. The Commission shall, by 31 December 2014, submit to the European Parliament and to the Council a report on the availability of financial security instruments, and on the handling of compensation claims, where appropriate, accompanied by proposals.
- 2. The Commission shall, by 19 July 2015, submit to the European Parliament and to the Council a report on its assessment of the effectiveness of the liability regimes in the Union in respect of the damage caused by offshore oil and gas operations. That report shall include an assessment of the appropriateness of broadening liability provisions. The report shall be accompanied, where appropriate, by proposals.
- 3. The Commission shall examine the appropriateness of bringing certain conduct leading to a major accident within the scope of Directive 2008/99/EC of the European Parliament and of the Council of 19 November 2008 on the protection of the environment through criminal law. The Commission shall, by 31 December 2014, submit a report on its findings to the European Parliament and the Council, accompanied, where appropriate, by legislative proposals, subject to appropriate information being made available by Member States.

It draws on studies performed for the Commission by the University of Maastricht,³ as well as Bio by Deloitte and Stevens & Bolton, LLP.⁴ A comprehensive group of stakeholders was consulted in the preparation of these studies, as well as in a stakeholder roundtable held on 17 September 2014 to discuss the findings of the study by Bio and Stevens & Bolton. The University of Maastricht study was further peer reviewed by Peter Cameron, Professor of International Energy Law and Policy, and Director of the Centre for Energy, Petroleum and Mineral Law and Policy at the University of Dundee.

² Directive 2008/99/EC of the European Parliament and of the Council of 19 November 2008 on the protection of the environment through criminal law, http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:328:0028:0037:EN:PDF.

¹ Directive 2013/30/EU of the European Parliament and the Council of 12 June 2013 on the safety of offshore oil and gas operations and amending Directive 2004/35/EC, http://eur-lex.europa.eu/LexUriServ/LexUriServ/do?uri=OJ:L:2013:178:0066:0106:EN:PDF.

³ De Smedt, et al. (2013), *Civil Liability and Financial Security for Offshore Oil and Gas Activities*, Maastricht European Institute for Transnational Legal Research - METRO, Maastricht University.

⁴ BIO by Deloitte (2014), Civil liability, financial security and compensation claims for offshore oil and gas activities in the European Economic Area, Final Report prepared for European Commission – DG Energy.

TABLE OF CONTENTS

Pı	reface	2	1
In	itrodu	action	3
	Offs	hore accidents in perspective	3
	Why	liability is important	3
	Liab	vility and the Offshore Safety Directive	3
	Doci	ument outline	3
1	Th	ne Appropriateness of Criminal Liability for Offshore Accidents and Resulting Dama	ge
	3		
	1.1	Conclusions	
2		ability Regime Effectiveness	
	2.1	Civil liability for the Deepwater Horizon incident	
	2.2	Civil liability for offshore accidents in the EEA	
	2.3	Industrial agreements	
	2.4	Contractual agreements	3
	2.5	Economic loss and the floodgates issue	3
	2.6	Strict liability and the negligence rule	3
	2.7	Incentivizing precautionary measures among potential victims	
	2.8	Liability and enterprise	3
	2.9	Beyond territorial waters	3
	2.10	Transboundary compensation: Jurisdiction and applicable law	3
	2.11	Conclusions	3
3	Fi	nancial Security Instruments and their Availability	3
	3.1	The financial security instruments available on the market	3
	3.2	The financial security instruments accepted by authorities	3
	3.3	Conclusions	3
4	На	andling Compensation Claims	3
	4.1	Compensation schemes for offshore accidents in Norway	3
	4.2	OPOL	3
	4.3	Civil rules of procedure	3
	4.4	Conclusions	3
A	nnex	I. Legal dispute over hypothetical oil spill claims under yhe US Oil Pollution Act	3
A	nnex	II. Criminal Liability for offshore safety breaches in selected Focal States	3
	i. :	Denmark	3

ii. Norway	
iii. UK	
Annex III. Summaries of EEA member country liability regimes appliaccidents 3	cable to offshor
iv. Bulgaria	
v. Croatia	
vi. Cyprus	
vii. Denmark	
viii. France	
ix. Germany	
x. Greece	
xi. Iceland	
xii. Ireland	
xiii. Italy	
xiv. Latvia	
xv. Lithuania	
xvi. Malta	
xvii. The Netherlands	
xviii. Norway	
xix. Poland	
xx. Portugal	
xxi. Romania	
xxii. Spain	
xxiii. United Kingdom	
Annex IV. Financial security instruments accepted by competent authoriti	
States to cover third-party damage from offshore oil and gas activities	
i. Bulgaria	
ii. Croatia	
iii. Cyprus	
iv. Denmark	
v. France	
vi. Germany	
vii. Greece	
viii. Iceland	

ix.	Ireland	3
x. It	aly	3
xi.	Latvia	3
xii.	Lithuania	3
xiii.	Malta	3
xiv.	Netherlands	3
XV.	Norway	3
xvi.	Poland	3
xvii.	Portugal	3
	Romania	
xix.	Spain	3
XX.	United Kingdom	3

INTRODUCTION

Although offshore oil and gas operations take place in many European Economic Area (EEA) member countries, liability for civil damage from these operations is poorly understood. Also known as third party damage, or 'traditional damage' in the EU *acquis*, ⁵ such damage may include bodily injury and property damage, as well as economic loss by commercial fisheries, the tourism sector or other coastal businesses.

A public consultation by the Commission revealed that the expectations of the public, civil society and some authorities are high, but there is no coherent perspective on the kinds of claims that would be permissible, nor how to manage such claims effectively in the case of major accidents – particularly accidents that cross boundaries.⁶

This document, and the Report to the European Parliament and Council it accompanies, aim to present an overview of these issues and propose ways in which the European Union (EU) could address any shortcomings that may exist in the current legal frameworks.

Offshore accidents in perspective

In recent years, major offshore incidents such as Deepwater Horizon and Montara have highlighted the need to tackle a handful of unresolved issues surrounding civil liability and compensation for such events. As well as raising questions such as whom to hold accountable, how and to what extent, these accidents have also flagged up more challenging problems.

The first of these is the *insolvency problem*. The 2010 Deepwater Horizon disaster showed that offshore accidents could cost significantly more than previously thought, so much so that only the very largest companies would be able to cover the costs of the worst accidents. Not only were 11 lives and a state-of-the-art drilling rig lost, but nearly 5 million barrels of oil was also released into the Gulf of Mexico causing widespread environmental and economic damage.⁷

Should the costs of responding to, and recovering from, an accident overwhelm the resources of the liable company in the EU, the effect would be a socialization of these costs to local communities, the State and other businesses dependent on the marine economy. This is a salient issue in the EU because as technology opens access to new resources in deeper waters, there is an increasing penetration of smaller firms in the industry.

The second problem raised is the *transboundary problem*. As well as being more costly to remediate, major offshore accidents are also more likely to have a large geographical footprint. Indonesia's unsuccessful legal efforts to claim compensation for damages resulting from the 2009 Montara

⁵ The legislation, legal acts and court decisions which together make up EU law.

⁶ Commission staff working paper: Impact assessment accompanying the document 'Proposal for a regulation of the European Parliament and of the Council on safety of offshore oil and gas prospection, exploration and production activities', SEC(2011) 1292 final, http://ec.europa.eu/energy/oil/offshore/doc/ia annexes 20122-1292.pdf.

⁷ Bureau of Ocean Energy Management, Regulation and Enforcement (2011) 'Report Regarding the Causes of the April 20, 2010 Macondo Well Blowout', US Department of the Interior, http://docs.lib.noaa.gov/noaa_documents/DWH_IR/reports/dwhfinal.pdf.

blowout on the Australian Continental Shelf⁸ demonstrate the tremendous challenge posed by the current lack of international law applicable to offshore accidents.

Insofar as the existing international legal framework makes it difficult to make successful transboundary damage claims, the costs of offshore accidents are further externalized. This may adversely influence the risk-related decision making of both firms and licensing authorities for offshore operations close to marine boundaries. It certainly has significant implications for victims seeking compensation for offshore accidents originated in other jurisdictions.

Why liability is important

It is widely accepted that the costs of pollution should generally be borne by those who cause it and not others. This is the polluter-pays-principle, an important pillar of EU environmental law as well as numerous other international agreements.

The liability regime is the primary means through which the polluter-pays-principle is applied. It ensures that firms are held appropriately accountable for any damage they may cause in the course of doing business. It also incentivizes them to adopt measures and develop practices that minimise the risks of such damage. Through this, liability can be thought of as a system for inducing people and firms to behave in socially efficient ways – that is to say, ways that minimize the combined costs of injuries and the precautions taken to avoid injuries.

Liability plays in important role in complementing regulation because regulators may not fully appreciate some risks (which liability would incentivise industry to address) and industry may not fully appreciate others (which regulation would require industry to address). Moreover, regulation is necessary where external costs exist, as these prevent firms from taking all necessary steps to reduce accident losses efficiently. Together, regulation and liability thereby ensure a higher level of deterrence and are mutually reinforcing.

Preventative benefits aside, the liability regime is also important in ensuring that injured parties can quickly recover damage costs, giving it an important restorative role following an accident.

Finally, liability rules also reflect societal values. On the one hand, since it is the polluter who 'causes' the damage, fairness considerations entail that they should pay for this damage, not other members of society. On the other, societal preferences are also reflected in the kinds of damage that are compensable and how the legal system discriminates between legitimate and illegitimate claims. These safeguards help to ensure potentially liable parties also receive just treatment.

Liability and the Offshore Safety Directive

Member States are currently in the process of updating their national legislative frameworks for offshore oil and gas operations to be in line with the Offshore Safety Directive (OSD). They have until 19 July 2015 to enact the provisions of the Directive in national legislation, after which the basic elements of a comprehensive EU-wide framework for preventing major accidents and limiting their consequences should be in place.

⁸ The blowout lasted 74 days at estimated flow rates of 400 to 1,500 barrels per day. Borthwick (2010) ' Report of the Montara Commission of Inquiry', Commonwealth of Australia, http://www.industry.gov.au/resource/Documents/upstream-petroleum/approvals/Montara-Report.pdf.

Whilst being primarily directed at the regulation and management of offshore risks, the OSD also puts in place several measures that directly or indirectly address liability and compensation for offshore accidents.

First, Article 7 of the OSD requires licensees to be directly and solely financially liable for the prevention and remediation of environmental damage. Together with Article 38, which extends the Environmental Liability Directive⁹ (ELD) to Member States' continental shelves, this effectively makes offshore licensees strictly liable for any environmental damage resulting from their operations.

Environmental liability within the meaning of the ELD refers to liability for ecological damage to protected species and natural habitats, damage to water and damage to soil. Environmental liability is based here on a public, administrative liability approach where the affected party is not a concrete natural or legal person but society as a whole due to the public and universal character of the effects of any damage to shared natural resources. The role of the claimant is fulfilled by public authorities, whose job it is to ensure that polluters remedy the ecological damage they cause. It is therefore the public authority which is entrusted with the representation of the environmental protection interest to ensure that the liable operator is identified, the causal link is established, the remediation plan is established and approved, the necessary preventive action or remedial action is taken, etc.

Secondly, Articles 4(1) to 4(3) put forward preconditions on licensing aimed at ensuring that licensees never find themselves technically or financially unable to deal with the consequences of their offshore operations. If effectively implemented and enforced, these exposure-based requirements will mitigate significantly the insolvency problem described in the Introduction.

Thirdly, Article 4(3) requires Member States to "establish procedures for ensuring prompt and adequate handling of compensation claims including in respect of compensation payments for transboundary incidents" without prescribing in detail what those procedures might be.

Finally, that same article also obliges Member States to "facilitate the deployment of sustainable financial instruments and other arrangements," again without detailing how this should be done.

Table 1: Types of liability applicable to offshore oil and gas operations and legislation in place in the EU¹⁰

Type of liability		Applicable legislation		
Environmental			EU law (Environmental Liability Directive) and	
Environmental			national law	
	Bodily harm			
Civil, third party or	Property damage		National law	
'traditional'	Economic	Consequential	inational law	
	loss	Pure		
Criminal			National law	

We therefore see that whereas the OSD contains specific provisions for liability and compensation-related issues it does not put in place a comprehensive EU framework for liability.

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⁹ Directive 2004/35/CE of the European Parliament and of the Council of 21 April 2004 on environmental liability with regard to the prevention and remedying of environmental damage, http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32004L0035&from=EN.

There are overlaps between environmental liability, as defined in the ELD, and civil or third party liability.

¹⁰ There are overlaps between environmental liability, as defined in the ELD, and civil or third party liability. This is because liability under the ELD extends from the damaged natural resources to the services these damaged natural resources provide to other natural resources or to the public. See Article 2(13). In addition, existing regimes of civil liability addressing pollution damage, in particular in specific sectors (e.g. maritime transport) which are linked to the offshore oil and gas industry, explicitly cover environmental damage and oblige operators to cover the costs of reinstatement of the environment as well as relevant preventive measures

First, it does not deal with liability for civil damage – damage caused to natural or legal persons. The kinds of damage and loss in this broad category include bodily injury, property damage and economic loss. 11 In the case of the latter, courts may make a further distinction between consequential economic loss, which is economic loss resulting from bodily injury or property damage, and pure economic loss, which is economic loss in the absence of bodily injury or property damage.

Secondly, the OSD does not address criminal liability for offshore accidents, the potential penalties for which include fines and imprisonment, as well as other non-custodial punishments. Criminal liability refers to liability that arises out of committing a criminal act qualified as such by the law. There is a fundamental difference between civil as well as environmental liability on the one hand and criminal liability on the other. Whereas the liability rules on the former result in penalties that are exclusively financial and aimed at compensating and remedying damage caused, 12 criminal liability aims at punishing wrongful conduct and penalties may include imprisonment as well as fines and other noncustodial punishments.

Document outline

The remainder of this document addresses the principle outstanding issues around liability for offshore accidents.

Chapter 1 presents a brief discussion of the possible preventative and punitive benefits of criminal liability for offshore accidents, as well as a description of Directive 2008/99/EC on the protection of the environment through criminal law.

Chapter 2 presents an overview and analysis of civil liability regimes for offshore accidents in the EEA – the focus of the current study – as well as the civil liability regime in the United States and the real-world civil damages awarded following the 2010 Deepwater Horizon disaster.

Chapter 3 provides an overview of financial security instruments for managing offshore accident risk in the EEA and reviews the kinds of instruments accepted by authorities in the EEA member countries with offshore oil and gas activities (henceforth Focal States¹³).

Finally, Chapter 4 looks at the compensation mechanisms for offshore accidents currently in place in the EEA, including the existing legislation which harmonizes the national conflict of law rules in cases of transboundary pollution.

¹¹ For example, the lost profits commercial fisheries, aquaculture, businesses in the tourism industry and other coastal commerce.

¹² With the exception of the so-called "punitive damages" in common law systems.

¹³ Bulgaria, Croatia, Cyprus, Denmark, France, Germany, Greece, Iceland, Ireland, Italy, Latvia, Lithuania, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Spain and the UK.

1 THE APPROPRIATENESS OF CRIMINAL LIABILITY FOR OFFSHORE ACCIDENTS AND RESULTING DAMAGE

Whilst offshore safety breaches already fall under the criminal code of many Focal States, neither the definition of the criminal offences nor the minimum type and level of sanctions are harmonized in the EU. For example, although the laws of Denmark, Norway and the United Kingdom (UK) contain provisions criminalizing certain compliance failures, these laws are widely divergent. More details can be found in Annex II of this document.

Criminal liability for safety breaches could add a layer of deterrence beyond civil penalties, which can help improve protection of the environment and the compliance with safety measures. Accordingly, Article 39(3) of the OSD, tasks the Commission with assessing and reporting on the appropriateness of bringing certain conduct leading to a major accident within the scope of the Environmental Crime Directive ¹⁴ (ECD). This report shall be accompanied, where appropriate, by legislative proposals.

The European Court of Justice confirmed in 2005¹⁵ that the Community had the competence to adopt criminal law measures related to the protection of the environment if this is necessary to ensure the efficient implementation of its environmental policy. Adopted on 19 November 2008, the ECD was the first EU Directive to contain provisions with regard to criminal liability. The ECD lays down a list of environmental offences that Member States must consider criminal if committed intentionally or with serious negligence. The Directive refers to existing EU legal instruments on environmental criminal law that already provide for prohibitions (listed in the Annexes of the Directive). In implementing this Directive in national law, Member States must attach criminal sanctions to these existing prohibitions insofar as the conduct causes or is likely to cause death or serious injury to any person or substantial damage to the quality of air, the quality of soil or the quality of water, or to animals or plants.

Article 83(2) of the Treaty on the Functioning of the European Union, establishes the legal basis for creating minimum rules for the definition of criminal offences and sanctions in a particular EU policy area. This expressly enables EU legislators to adopt: "minimum rules with regard to the definition of criminal offences and sanctions in the area concerned" if this "proves essential to ensure effective implementation of a Union policy in an area which has been subject to harmonisation measures".

The adoption of EU criminal law measures is therefore subject to the assessment of whether they are "essential" to achieving effective policy implementation. As such, the decision to include breaches of the OSD under the scope of the ECD can only follow a thorough necessity and proportionality test on whether criminal law measures would achieve the stated objective.

As stated in the Commission's communication on criminal law, ¹⁶ it is necessary to analyse whether measures other than criminal law measures – for example, civil or administrative sanction regimes – would not sufficiently ensure policy implementation and whether criminal law could address the problems more effectively. This will require a thorough analysis in an impact assessment preceding any legislative proposal, including an assessment of whether Member States' sanction regimes achieve

¹⁴ Directive 2008/99/EC of the European Parliament and of the Council of 19 November 2008 on the protection of the environment through criminal law (text with EEA relevance), http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32008L0099&from=EN.

¹⁵ Case C-176/03, *Commission* v. *Council*, judgment of 13 September 2005.

¹⁶ Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: Towards an EU Criminal Policy: Ensuring the Effective Implementation of EU Policies through Criminal Law ', 20/09/2011, COM(2011) 573 final, http://ec.europa.eu/justice/criminal/files/act en.pdf.

the desired result, as well as difficulties faced by national authorities implementing EU law on the ground.

If it were to be determined in the future that OSD in its present form cannot sufficiently ensure the safety of offshore operations as intended and that it is essential to link its aims with criminal liability for offshore breaches, such liability could be introduced as a new provision in the OSD through an amendment of that Directive. It could also be introduced through a standalone new legal act. However, the most coherent way would be to harmonize criminal sanctions through the ECD. This would avoid creating a different standard for criminal sanctions compared to the one established by the ECD for many environmental offences. It is why Article 39(3) of the OSD foresees the criminalization of offences under the OSD via an amendment of the ECD.

1.1 Conclusions

The deadline to implement the OSD in national law is 19 July 2015. At this point in time, most Member States have not yet implemented the pertinent provisions of the OSD yet. It is therefore too early to properly assess whether the national legal provisions implementing the OSD are sufficiently effective and subsequently whether EU criminal law measures would be essential to ensure effective offshore safety in the Union under Article 83(2) of the Treaty. For these reasons, the Commission cannot yet provide a full report on the appropriateness of bringing certain conduct leading to a major accident within the scope of the ECD.

2 LIABILITY REGIME EFFECTIVENESS

The significant civil damages awarded following the 2010 Deepwater Horizon disaster reflect both the widespread damage caused and the liability rules in place in the United States. Whilst no offshore accidents on the scale of Deepwater Horizon have occurred in the EEA, the absence of large-scale case studies limits any analysis of the liability regimes applicable to offshore accidents. This chapter therefore opens with a brief description of civil liability for the Deepwater Horizon incident. Following this, the chapter provides a detailed overview and analysis of legal regimes for third-party damage for offshore accidents in the EEA, before closing with an evaluation of the 'effectiveness' of the liability regimes in place and the appropriateness of broadening liability provisions.

As liability regimes seek to balance the interests of different parties following an accident, their 'effectiveness' is inherently subjective to those parties. Nevertheless, liability has an important role to play in maximising the social benefit of business operations (see Introduction), an important holistic measure of effectiveness for the purposes of this document. There are two additional principles that this document will also take into account when evaluating the effectiveness of liability regimes in the Focal States: The degree to which liability rules facilitate access to justice and the degree to which they uphold the polluter-pays-principle. These reflect important societal considerations and, as such, are respectively set out in Articles 67(4) and 191(2) of the Treaty on the Functioning of the European Union.

In line with the above, the following criteria will inform the analysis in this Chapter:

- The standard of liability, whether strict or fault-based;
- The extent to which the law provides for all legitimate claims;
- The application of tort law to the continental shelf and exclusive economic zone;
- The clarity in the wording of legislation establishing civil liability for pollution damage or dangerous activities which apply to offshore oil and gas accidents;
- How courts have tended to interpret and implement the relevant legal legislation;
- How the legal framework balances the interests of different marine and coastal stakeholders; and
- The impact of liability rules on business operations.

2.1 Civil liability for the Deepwater Horizon incident

The purpose of this Section is not to present US law as a normative 'yardstick,' but as contextual information. It is intended to help readers understand how the EEA liability laws addressed in Section 2.2 of this document might translate into damages awarded in the case of a major accident.

Three main bodies of law in the United States establish liability for civil damages from offshore oil and gas accidents: state common law; state oil pollution legislation; and – more importantly – the federal Oil Pollution Act of 1990 (OPA) and Clean Water Act (1972). Claims under one body of applicable law may not bar persons bringing claims under another. However, the application of state law may be displaced by federal law should there be a conflict between the two, in accordance with the United States Constitution Supremacy Clause. In the Deepwater Horizon litigation the Court

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¹⁷ Claims may also be compensable under general maritime law if they somehow involve a vessel or are significantly connected with a maritime activity. This was deemed to be the case in the Deepwater Horizon litigation, as 'Deepwater Horizon' was a Mobile Offshore Drilling Unit treated by the US courts as a 'vessel' to which admiralty jurisdiction applies.

applied CWA and OPA, as well as general maritime law, to pronounce on the liability of the defendant parties.¹⁸

Civil liability can be broken up into three main categories: Bodily harm, property damage and economic loss. Whereas claims for bodily injury and property damage can be made under State common law, the OPA lists several complementary categories of compensable damages likely to result from an oil spill. Notably, Section 2702(b) of the OPA provides for claims for environmental damage, as well as claims for "[d]amages equal to the loss of profits or impairment of earning capacity due to the injury, destruction, or loss of real property, personal property, or natural resources". ¹⁹ This includes certain claims for pure economic loss, although see Annex I of this report for a detailed discussion on exactly what sorts of claims would be covered, which has been the subject of a complex legal debate.²⁰ Liability under the OPA is strict.

The OPA has a \$75 million liability cap for civil claims excluding clean-up costs, 21 however BP waived this following the 2010 Deepwater Horizon incident, pledging to pay for all legitimate claims. Although there is still significant uncertainty regarding the total costs of the incident, the total cumulative charges recognized by the company stood at \$42.7 billion at the end of 2013 – a figure that includes all clean-up costs, criminal settlements and the \$20 billion Deepwater Horizon Oil Spill Trust that was set aside for compensation.²² The Gulf Coast Claims Facility (GCCF) was one a mechanism for settling claims drawn from the Trust. In its April 13, 2012 status report, the GCCF reported that over 96% of the \$6.3 billion it had paid out to December 30, 2011 were for "lost earnings or profits" i.e. economic loss.²³

Overall, as of June 2014, BP had paid around \$11 billion in civil compensation through the following four processes. (N.B. this figure does not include clean-up costs and criminal settlements.) The latter two processes are ongoing:

- 1. Initial BP claims programme (5 May 2010 to 22 August 2010): \$399 million
- 2. Claims paid by the GCCF (23 August 2010 to 4 June 2012): \$6.67 billion
- 3. Claims under the economic and property loss settlement agreement: ongoing
- 4. Claims under the medical benefits settlement agreement: ongoing

We therefore see that the legal framework constituted by state common law, state oil pollution legislation and the federal OPA and CWA in the United States recognised all major categories of damage from the Deepwater Horizon incident, albeit with a cap on liabilities voluntarily waived by

¹⁸ In re Oil Spill by the Oil Rig "Deepwater Horizon" in the Gulf of Mexico, on April 20, 2010, 745 F.3d 157. 2014 AMC 1600 (5th Cir. 2014).

¹⁹ 33 United States Code s 2702(a). The United States Code is available from: www.law.cornell.edu/uscode/text. ²⁰ John C.P. Goldberg, Liability for Economic Loss in Connection with the Deepwater Horizon Spill, vol. 30, 7 (22 November 2010), available from http://nrs.harvard.edu/urn-3:HUL.InstRepos:4595438. See 17 for all seventeen hypothetical claims, as well as more background to the debate.

²¹ This is currently under review. See US Department of the Interior, Bureau of Ocean Energy Management, Consumer Price Index Adjustments of the Oil Pollution Act of 1990 Limit of Liability for Offshore Facilities, Proposed Rule, 79 Federal Register 10,056 (24 February 2014); available at http://www.gpo.gov/fdsys/pkg/FR-2014-03-19/html/2014-06047.htm

²² BP plc (2014) *Annual Report and Form 20-F 2013*, p.40.

²³ BDO Consulting (2012), 'Independent Evaluation of the Gulf Coast Claims Facility Report Of Findings & Observations to the U.S. Department Of Justice', US Department Of Justice, http://www.justice.gov/iso/opa/resources/66520126611210351178.pdf.

BP²⁴. As well as significant clean-up costs and criminal settlements, the widespread pollution following the incident therefore also led to substantial civil liabilities, in particular claims for economic loss.

2.2 Civil liability for offshore accidents in the EEA

Table 2 below presents an overview of the legal regimes applicable to offshore accidents in the Focal States. It is based on the findings of a study done for the European Commission to address the subject.²⁵ Annex I of this document provides a more detailed description of these findings.

The tort law of the Focal States examined has evolved over a long period and is part of the jurisprudence of each country. It is not possible to directly compare the words or provisions in the Civil Code of one Target State with the same words in the Civil Code of another and conclude that they have the same meaning. Courts construe the meaning of words and provisions in Civil Codes and similar legislation in the context of the tort law of that Target State. This has especially important implications where the tort law of a country recognises pure economic loss, as claims for lost income or other losses from an offshore oil and gas incident will often be subject to subtle legal distinctions on criteria such as 'directness' or 'foreseeability' in order to succeed.

For this reason, Table 2 addresses not only the availability of economic loss in each Target State but also whether courts are likely to be liberal or conservative with respect to the award of such claims, where such information is available. In certain cases, the table also specifically states whether compensation for loss of income due to physical damage to un-owned resources is available – crucial for compensation to the fishing and tourist industries, as well as other coastal businesses following an offshore accident.

Table 2: Civil liability for offshore accidents in Focal States

Table 2. Civil	Table 2: Civil hability for offshore accidents in Focal States				
	Applicable	Bodily injury and	Economic loss	Further comments	
	legislation	property damage			
Bulgaria	a) Law on	Recognised under	• Unclear whether	Liability uncapped	
	Obligations and	a), b) and c)	recognised or not under	Burden concerning	
	Contracts	 Unclear whether 	a), b) and c)	proof of fault under a) is	
	b) Environmental	strict or fault-based	• If recognised, damage	reversed i.e. the	
	Protection Act	under a)	must be a direct and	tortfeasor (wrongdoer)	
	(probably not)	Fault-based under	immediate consequence	must show they did not	
	c) Water Act	b) and c)		act with fault	
	(probably not)				

²⁴ The cap of BP's liability under OPA was deemed by the Court to be removed on account of BP's violation of an applicable federal regulation concerning the cementing of the well, namely 30 C.F.R. §250.420(a)(2). See supra 18.

²⁵ BIO by Deloitte (2014), *Civil liability, financial security and compensation claims for offshore oil and gas activities in the European Economic Area, Final Report prepared for European Commission – DG Energy.*

	Applicable	Bodily injury and	Economic loss	Further comments
	legislation	property damage		
Croatia	Civil Obligations Act	Recognised Unclear whether strict or fault-based (no precedent on whether courts consider offshore activities 'dangerous')	Recognised 'Liberal' regime* Unclear whether strict or fault-based (no precedent on whether courts consider offshore activities 'dangerous') Claimant must show likelihood and intention of making a profit, and that pollution from offshore accidents is likely to cause the damage suffered	Production Sharing Agreement includes an indemnity and hold harmless agreement for compensation and other losses to the State
Cyprus	Law of Civil Wrongs	Recognised Fault-based	Recognised Fault-based Persons must have also suffered damage to property in which they had a legal interest, or bodily injury	Liability uncapped Production Sharing Contract imposes liability for bodily injury, property damage and, perhaps, pure economic loss Production Sharing Contract includes an indemnity for compensation to the State
Denmark	a) Subsoil Act (section 35) b) Liability for Damages Act c) Environmental Damage Compensation Act (perhaps)	 Recognised under a) and b) Strict under a) and c) Fault-based under b) 	 Recognised under a) and b) Strict under a) and c) Fault-based under b) Claimant must show that loss is direct and that defendant's act was likely to cause the loss 	Liability uncapped
France	a) Civil Code b) Mining Code	• Recognised • Fault-based	Recognised Fault-based 'Liberal' regime* Claims for pure economic loss from physical damage to "unowned resources" in the public domain recoverable*	Liability uncapped
Germany	a) Civil Code b) Water Resources Act (perhaps) c) Environmental Liability Act (perhaps)	 Recognised under a), b) and c) Fault-based under a) Strict under b) and c) 	Recognised by a) and b) Fault-based under a) Strict under b) 'Conservative' regime* Claimant must show that loss is direct and that business was established Claims for pure economic loss from physical damage to "unowned resources" in the public domain not recoverable*	A limit of liability may exist under a tort cause of action to which strict liability applies

	Applicable	Bodily injury and	Economic loss	Further comments
	legislation	property damage		
Greece	a) Civil Code b) Law 1650/86	 Recognised under a) and b) Fault-based 	Recognised under a) Fault-based 'Liberal' regime* Claimant must show the defendant was likely to cause the harm and that their act affected an interest protected by the law Claims for pure economic loss from physical damage to "unowned resources" in the public domain unsettled*	 Liability uncapped Draft Model Lease obliges a lessee, under strict liability, to ensure adequate compensation for bodily injury and property damage
Iceland	a) Hydrocarbons Law b) Tort Damages Act	 Recognised under a) and b) Strict under a) Fault-based under b) 	Recognised under a) and perhaps b) Strict under a) Fault-based under b) Unclear whether a) recognises pure economic loss	 Liability uncapped Model Licence includes an indemnity and hold harmless agreement for compensation to the State
Ireland	a) Civil Liability Act b) Common law	Recognised undera) and b)Fault-based	Pure economic loss may be available, but only if the loss was foreseeable and significant, and even if so the claimant would face a heavy burden establishing liability Fault-based, if available	Liability uncapped
Italy	Civil Code	Recognised Unclear whether strict or fault-based (no precedent on whether courts consider offshore activities 'dangerous')	Recognised Unclear whether strict or fault-based (no precedent on whether courts consider offshore activities 'dangerous') Claims for pure economic loss from physical damage to "unowned resources" in the public domain unsettled*	Liability uncapped
Latvia	Civil Code	Recognised Unclear whether strict or fault-based (no precedent on whether courts consider offshore activities 'dangerous')	Recognised Unclear whether strict or fault-based (no precedent on whether courts consider offshore activities 'dangerous') Claimant must show that loss is direct	Liability uncapped

	Applicable legislation	Bodily injury and property damage	Economic loss	Further comments
Lithuania	a) Civil Code b) Law on Environmental Protection	Recognised under a) and b) Unclear whether strict or fault-based under a) (no precedent on whether courts consider offshore activities 'dangerous') Fault-based under b)	Recognised under a) Unclear whether strict or fault-based under a) (no precedent on whether courts consider offshore activities 'dangerous') Fault-based under b) Unclear whether pure economic loss is available	Liability uncapped
Malta	Civil Code	• Recognised • Fault-based	RecognisedFault-basedClaimant must show that loss is direct	 Liability uncapped Model Production Sharing Contact imposes liability for any loss or damage suffered by or done to the Government, to the environment or to third parties.
Netherlands	Civil Code	• Recognised • Strict	Recognised Strict Claims for pure economic loss from physical damage to "unowned resources" in the public domain unsettled*	Liability uncapped
Norway	a) Petroleum Act b) Pollution and Waste Act c) Act Relating to Compensation in Certain Circumstances d) Svalbard Act	 Recognised under a), b), c) and d) Strict under a), b), c) and d) 	 Recognised under a), b), c) and d) Strict under a), b), c) and d) 	The liability of a tortfeasor may be reduced under a) and c) depending on the circumstances of a pollution incident Categories of available economic loss to fishermen explicitly stated in a)
Poland	a) Civil Code b) Mining Law	Bodily injury and property damage recognised under a) Property damage recognised under b) Unclear whether strict or fault-based under a) (no precedent on whether courts consider offshore activities 'dangerous') Strict under b)	Recognised under a), but only if there is a high probability of the loss from the tort Unclear whether strict or fault-based under a) (no precedent on whether courts consider offshore activities 'dangerous') 'Conservative' regime* Claims for pure economic loss from physical damage to "unowned resources" in the public domain not recoverable*	Liability uncapped

	Applicable	Bodily injury and	Economic loss	Further comments
	legislation	property damage		
Portugal	a) Civil Code b) Decree-Law No. 147/2008 (if applicable) c) Law 11/87 (if applicable)	 Recognised under a), b) and c) Strict under b) and c) Unclear whether c) applies (no precedent on whether courts consider offshore activities 'particlarly dangerous') 	Recognised under a) Fault-based Claimant must show that loss is direct Conservative' regime* Claims for pure economic loss from physical damage to "unowned resources" in the public domain not recoverable*	Liability uncapped
Romania	a) Petroleum Law b) New Civil Code	 Recognised under a) and b) Fault-based under a) and b) 	• Recognised under b) • Fault-based • 'Conservative' regime*	Liability uncapped
Spain	Civil Code	• Recognised • Fault-based	Recognised Fault-based Loss must be foreseeable, certain and adequately proven Liberal' regime* Claims for pure economic loss from physical damage to "unowned resources" in the public domain not recoverable*	Liability uncapped
United Kingdom	Common law	• Recognised • Fault-based	Recognised Persons must have also suffered damage to property in which they had a legal interest, or bodily injury Claims for pure economic loss from physical damage to "unowned resources" in the public domain not recoverable*	Liability uncapped Model Clauses for a licence include an indemnity for third-party claims to the State

^{*} Francesco Parisi, Vernon V. Palmer and Mauro Bussani, The Comparative Law and Economics of Pure Economic Loss, International Review of Law and Economics 16, 22 (George Mason University School of Law, Law and Economics Research Paper No. 05-12 and University of Minnesota Law School, Legal Studies Research Paper No. 07-18, 2006); available at https://www.lider-law-and-economics-of-pure-economic-loss-francesco-parisi-vernon-v-palmer-mauro-bussani.html

2.3 Industrial agreements

Although it is an industry mutual agreement, and therefore primarily addressed in Chapter 3 of this document, the Offshore Pollution Liability Association Ltd (OPOL) forms an important part of any analysis of civil liability for offshore accidents in the EEA because it requires its members to accept strict liability for damage and loss as a condition of membership. The scheme is open to offshore operators in many Focal States and is a prerequisite of licensing in the United Kingdom (UK). It therefore complements existing liability legislation even though it is a voluntary, non-legislative scheme.

When established in 1975, OPOL was intended to be an interim measure until a Convention of Civil Liability for Oil Pollution Damage resulting from Exploration for and Exploitation of Seabed Mineral Resources came into effect. However, the regional convention has not entered into force and is highly unlikely to do so due to a disagreement concerning its provisions. OPOL has therefore continued in existence.

OPOL is not a fund. Following an incident, claims are not made directly against OPOL itself, but against the member company liable for damage and loss. Member companies agree to compensate claimants according to certain terms and conditions (see paragraph below) up to a limit of \$125 million for remediation costs and \$125 million pollution damage. In return, they benefit from a guarantee that other companies in the scheme will pay for any liabilities they are financially unable to pay for themselves up to the aforementioned financial limits. This mutualisation of insolvency risk helps reduce insurance costs and reassure regulators and the public of the financial capacity of offshore operators. The industry scheme may also have reduced the need for more stringent liability laws.

The OPOL Liability Agreement²⁷ sets out the terms and conditions under which the members shall pay compensation in the event of a spill of oil from an offshore facility. Under this, members accept strict liability for remediation costs incurred by public authorities as well as "pollution damage", defined as "direct loss or damage… by contamination which results from a Discharge of Oil". There are therefore obvious benefits in this scheme for claimants in the UK, where liability is fault-based under common law.

The scheme also adds a layer of industry scrutiny of financial responsibility over and above the checks performed by public authorities. In order to join OPOL, companies must provide proof that they would be able to cover liabilities set out in the OPOL Liability Agreement (see Section 3.2). This reassures current members that they probably will not have to bear the costs of any damage the applicant might cause, cross subsidizing their risk and violating the polluter-pays-principle.

Notwithstanding these benefits, a study done for the European Commission²⁸ found concerns that OPOL may suffer from certain limitations from the viewpoint of a claimant. These include:

- the fact liable operators decide whether claims made against them are covered by the scheme i.e. whether damage is "direct" and whether a claim is "reasonable, quantifiable and justifiable";
- the \$250 million cap on reimbursement and compensation per incident that OPOL covers, which may not cover all damage and loss from the worst accidents;
- the lack of cover for claims for compensation as a result of a discharge or release of gas, dispersants or any substance other than oil;
- the inability of a person, other than a governmental entity, to claim compensation for remedial measures;
- the one-year limitations period to file a claim;

²⁶ Funds may be redistributed between these two categories should any surplus remain.

²⁷ OPOL (2014) 'Offshore Pollution Liability Agreement ("OPOL") (amended in Extraordinary General Meeting on 28 October 2013 to take effect on 1 January 2014)', http://www.opol.org.uk/downloads/OPOL-Agreement-01Jan14.pdf.

²⁸ For further details, see BIO by Deloitte (2014), *Civil liability, financial security and compensation claims for offshore oil and gas activities in the European Economic Area, Final Report prepared for European Commission – DG Energy*, pp. 152-159.

- the (perceived at least) requirement to enter into an arbitration agreement with the operator in order to file a claim under OPOL;
- the lack of a requirement to show a minimum net worth, a positive net income, or similar indications that a member of OPOL is sufficiently financially secure to pay claims if they arise.

OPOL does not bar a claimant bringing an action against the operator (or other persons) in a court. However, if the claimant does so, national law would apply and not the OPOL Liability Agreement. If the applicable jurisdiction placed a heavy burden on the claimant in establishing liability, there would be a strong incentive to comply with the procedures set out by OPOL despite the shortcomings mentioned above.

2.4 Contractual agreements

Another way of complementing liability legislation is to impose more stringent liability rules through contractual agreements, an option that seems to have been chosen by Cyprus and Greece.

The Production Sharing Contract for Cyprus appears to impose strict liability for bodily injury and property damage whereas liability under the Law of Civil Wrongs is fault-based. The Contract provides that "[t]he Contractor shall indemnify and compensate any person, including the Republic [of Cyprus], for any damage or loss which the Contractor, its employees or subcontractors and their employees may cause to the person, the property or the rights of other persons, caused by or resulting from Hydrocarbons Operations, including any environmental damage". The meaning of the word "rights" is not entirely clear. It may mean, for example, the right to occupy or to use property. The Contract does not appear to provide liability for pure economic loss.

Likewise, the Draft Model Lease Agreement for Greece provides that the lessee agrees "to take all necessary and adequate steps... to ensure adequate compensation for injury to persons or damage to property caused by the effect of the Petroleum Operations". If the agreement imposes liability on a lessee, this liability does not appear to extend to pure economic loss.

Under the Cypriot and Greek contractual agreements, only the State has the right to require the licensee / lessee to carry out its obligations under the contract. Claimants do not have any rights under the contracts so would need to persuade the State to act on their behalf. The contractual provisions do not explicitly unpack the details of the type of claims that are covered.

2.5 Economic loss and the floodgates issue

Sections 2.2 to 2.4 above show that, the law in Focal States always provides for claims for bodily injury and property damage from offshore accidents. They also show that liability for offshore oil and gas accidents is almost always financially uncapped in the EEA.²⁹ Apart from this, however, Focal States handle civil liability for such accidents very differently and there is sometimes uncertainty surrounding how their legal systems would deal with the variety of civil claims that could result. The following sections in this Chapter describe and discuss these differences and uncertainties in greater detail.

²⁹ An exception to this general rule is Germany, in which a limit of liability may exist under a tort cause of action to which strict liability applies.

An important finding is that the legal regimes of Focal States handle liability for economic loss in different ways. They limit economic loss claims based on the 'directness' of the loss suffered³⁰ to different degrees, or even exclude them outright in the absence of bodily harm or property damage (the exclusionary rule).³¹ 'Pure' economic losses such as these are sometimes deemed too remote and speculative to be laid at the defendant's door. It is important to note, however, that all Focal states limit economic loss claims in some way.

To illustrate, claimants that seem unlikely to obtain redress in certain Focal States include ferry companies and businesses that process fish affected by a ban on fishing. The economic losses suffered by such claimants may not arise directly from a spill, but the experience of Deepwater Horizon tells us that they can still comprise a sizeable portion of the damage from an offshore accident on rare occasions. This may affect the fishing and tourism industries in these Focal States, which comprise a great number of small and medium-sized enterprises (SMEs), as well as other sectors that rely on the good condition of the shared marine environment for their business.

Text Box 1: Direct and remote damage

Besides the exclusionary rule, the tort law Focal States recognises only 'direct' claims and not claims for damage and loss that are remote from the event causing the harm. For example, a court may consider that the income lost by a fisherman due to a fishing ban is direct because pollution directly affects the fish in the sea: there is no person between the fish and the fisherman to make the harm indirect. However, a court may consider that a claim for lost income by a seaside hotel is indirect because it results from the decisions of people that would have come to the hotel but for the oily beaches, i.e. there is a legal or natural person between the polluted beach and hotel that makes the claim more remote.

Insofar as the legislation in Focal States excessively limits economic loss claims, it creates externalities and disincentivizes firms from taking the appropriate steps to reduce accident losses. However, there are valid reasons for limiting liability for economic loss, in particular liability for pure economic loss.

The court proceedings following the Deepwater Horizon incident show that oil spill claims litigation can be complex and that a practical balance needs to be struck between the need to compensate victims fully and the danger of inviting illegitimate claims. Setting well-defined and well-designed parameters is essential to achieving this.

The major argument against the recognition of pure economic loss is the "floodgates" issue: If unlimited liability for economic loss is recognised, the floodgates would be open and it would be impossible to prevent the payout of remote claims that society would not view as legitimate. The difficulty lies in the fact that economic losses are likely to be serially linked to one another in an interdependent, modern economy. It is therefore necessary to set reasonable limits to the extent to which the more remote economic impacts of an accident should be compensable to avoid excessive liability and introduce certainty on levels of financial responsibility.

Member State differences on economic loss often extend beyond the offshore sector, to general tort law. Whilst Member States handle economic loss claims differently, these differences often stem from well-established legal traditions and may reflect societal preferences on how to resolve grievances

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³⁰ This is the case in Bulgaria, Croatia, Denmark, Germany, Greece, Iceland, Italy, Latvia, Lithuania, Malta, the Netherlands, Norway, Poland, Portugal, Romania, and Spain.

³¹ This is the case in Cyprus and the UK.

fairly. These factors influence the kinds of claims considered legitimate by Member State justice systems, as well as the principles that courts use to differentiate between legitimate claims and ordinary risks faced by participants in the economy.

Strict liability and the negligence rule

Another key finding is that offshore accidents mostly fall under the tort law of Focal States and therefore the negligence rule usually applies.³² Here, claimants must prove negligence in order to win damages.³³ Courts rule on whether the liable party breached a standard of care by weighing the risk of their activity against the cost and effectiveness of precautions to reduce this risk. As well as serving an important societal utility function, the negligence rule also reflects the moral position that recklessness should be more blameworthy than conduct with due care.³⁴

Where purpose-built legislation is in place, strict liability usually applies.³⁵ Strict liability also applies under the Offshore Pollution Liability Association Ltd (OPOL), membership of which is a prerequisite for offshore operations in the UK (see Section 2.7). Under a strict liability rule, the polluter pays for the damage and loss his conduct causes the victim regardless of whether it can be proved he was negligent. Strict liability makes it easier for a claimant to gain compensation, but it does not mean all claims will succeed. As a safeguard against excessive liability, claimants must still establish causation and damage.

Strict liability may sometimes also apply under special sections of the Civil Code or common law that deal with so-called 'dangerous activities'. However, this document finds that there is almost always a lack of legal precedent that would clearly classify offshore operations as 'dangerous' where this is the case.36

The literature suggests that strict liability may have a number of benefits when applied to offshore oil and gas operations. As information about offshore accidents can be scarce, monitoring problematic and damage diffuse, strict liability reduces the ability of firms to unduly benefit from the difficulty of establishing legal proof of negligence to avoid paying out for legitimate claims. Under the negligence rule, the burden usually falls on claimants to present enough information to prove a breach of the standard of care. However, information relevant to this - the frequency of accidents or the cost and efficacy of countermeasures, for example - may only be available to the liable party. Furthermore, where such information is available, interpreting it may be unfeasibly complex, particularly when dealing with high-impact, low-probability events. Strict liability therefore removes a heavy bias against offshore accident claimants.³⁷

³² This is the case in Bulgaria, Croatia, Cyprus, France, Germany, Greece, Ireland, Italy, Latvia, Lithuania, Malta, Poland, Portugal, Spain and the UK. Significant claims in Germany, Portugal and Romania are also likely fall under the tort law. Although offshore accidents fall under the tort law of the Netherlands, liability is strict.

³³ The exception to this is fault-based tort law in Bulgaria, where the tortfeasor bears the burden of showing that it did not act with fault.

34 'Origin of the Modern Standard of Due Care in Negligence', *Washington University Law Quarterly*, 1976, 3,

³⁵ This is the case in Denmark, Iceland and Norway. Certain claims in Germany may also fall under purposebuilt legislation in which liability is strict. Although some claims may fall under purpose-built legislation in Bulgaria and Lithuania, liability is fault-based.

³⁶ This is the case in Croatia, Italy, Latvia, Lithuania, Poland and Portugal.

³⁷ 'Origin of the Modern Standard of Due Care in Negligence', Washington University Law Quarterly, 1976, 3, 447-479.

Strict liability reduces transaction costs following an offshore accident. It does this by speeding up compensation as there is no need for legal proceedings to establish fault beforehand. Furthermore, it facilitates the quick settlement of lawsuits by reducing uncertainty about probable judgements. As the costs of accidents tend to rise steeply with time and major accidents may involve a large number of victims, all parties may share an interest in this.³⁸

Finally, strict liability better internalizes accident costs and helps to achieve greater efficiency. Although the negligence rule incentivizes firms to exercise the standard of care in carrying out an activity, it does not lead these firms to moderate the level of this activity because this is not normally a part of determining negligence. This is a problem where adherence to the standard of due care does not fully eliminate the possibility of accidents. Here, uncompensated damage from claims in which victims are unable to prove negligence becomes an external cost, leading to underdeterrence. The higher administrative cost of establishing negligence compounds this by discouraging victims from seeking redress. Holding a firm strictly liable for the injuries caused in producing a good could help ensure that accident costs are reflected in the price of that good. This, in turn, provides a price signal that moderates the demand for more dangerous goods and encourages consumers to select safer alternatives.

2.7 Incentivizing precautionary measures among potential victims

Liability can be limited in several ways. As well as the negligence rule, exclusionary rule and directness provisions, all discussed above, liability may also be financially capped. Liability is generally uncapped in the Focal States. Only Germany applies a financial cap, and only under certain conditions.⁴¹

No matter how it is done, however, limiting liability for offshore accidents encourages potential victims to take precautions against the harms they could be exposed to. If this is cheap for them to do and effective, then the combined costs of accidents and precautions would decrease, which would be socially beneficial. However, while this may work for many kinds of accidents – road traffic accidents, for example – it seems less relevant for offshore accidents. There is little that many potential victims could reasonably do to reduce the economic impact of an oil spill.

2.8 Liability and enterprise

Although subsidies are commonly understood as the direct budgetary support of governments, the OECD has concluded that "there is no universally accepted definition of a subsidy" and instead defines subsidies as "any measure that keeps prices for consumers below market levels, or for producers above market levels or that reduces costs for consumers and producers."

23

³⁸ An alternative view is that strict liability can encourage illegitimate claims, thereby increasing transaction costs in weeding these out. Shavell, S. (2010) *The Corrective Tax versus Liability as Solutions to the Problem of Harmful Externalities*, Harvard Law and Economics Discussion Paper No. 671.

³⁹ Shavell, S. (1980) 'Strict Liability versus Negligence', *Journal of Legal Studies*, 9, 1-25.

⁴⁰ Calabresi, G. & Hirschoff, J. (1972) 'Toward a Test for Strict Liability in Torts', *Yale Law Journal*, 81, 6, 1055-1085.

⁴¹ See Table 2, the Civil Liability Convention and the Fund Convention, which impose liability for pollution damage from ships, as well as the US Oil Pollution Act described in Section 2.1.

⁴² OECD (2006), 'Subsidy Reform and Sustainable Development: Economic, Environmental and Social Aspects', *OECD Sustainable Development Series*.

⁴³ OECD (1998), Improving the environment through reducing subsidies: Part 1.

Viewed in this light, limiting liability for offshore accidents can be seen as an indirect subsidy. If occasional accidents are a normal part of doing business for offshore oil and gas firms – albeit an unwelcome part – then a permissive liability regime effectively provides these firms with an *ex post* payout following an accident as uncompensated victims bear some of the costs of their doing business. Risk is reallocated from the firm to society.

On the one hand, because the 'orphan shares' of pollution damage represent external costs, they could diminish social welfare in the same way any arbitrary tax or subsidy would (see final paragraph of Section 2.6).

On the other, liability can also be *deliberately* limited in spite of these concerns as a practical measure to facilitate enterprise. The general concept has other analogues in the economy. For example, encouraging enterprise is the explicit goal of the limited liability business structure. ⁴⁴ Although controversial when initially introduced, the widespread acceptance of limited liability is acknowledgement that the benefits of limiting potential losses faced by shareholders far outweigh the cost of a slightly higher risk of debt default. ⁴⁵

The offshore sector's external benefits⁴⁶ are numerous and include substantial tax revenues (see Text Box 2), employment, energy security and improving the trade balance. Given that the combined value of these benefits may be very significant, the state could seek to provide some level of public risk funding to the sector as a Pigouvian subsidy – a subsidy that recognizes the external benefits an activity brings. Almost all economic activity produces some form of risk. Provided this subsidy does not result in significantly increased accident costs, then it could respect legitimate societal interests.

Text Box 2: Effective rate of taxation on oil produced in the UK or UK Continental Shelf, 2012-2013⁴⁷

The UK accounts for the largest levels of offshore oil production in the EU. Producers of oil in the UK or UK Continental Shelf were subject to corporation tax and supplementary charge to corporation tax, at 30% and 32% respectively for the financial year to 31 March 2013. In addition, depending on the date on which the government gave its initial consent to the development of a field, that producer may also be subject to petroleum revenue tax (PRT), at 50%. Combined, these taxes result in a government take of between 62% and 81% on the production value of oil, depending on whether the field was chargeable to the PRT or not.

A more limited liability regime will lower the costs of doing business for many offshore firms by introducing greater certainty on levels of financial responsibility. It may also allow firms reduce the precautions necessary for risk-neutral operations and take out lower limits of indemnity, discounting insurance premiums (see Chapter 3). Reducing barriers to entry and increasing competition within the offshore sector will help to ensure the efficient development of oil and gas resources, along with any aggregate social benefits this brings.

Nonetheless, there are numerous ways for the state to encourage enterprise and a full discussion of the relative merits of doing this through the civil liability regime is beyond the scope of this document. The findings presented here suggest that there is no *prima facie* relationship between the variety of

⁴⁷ KPMG (2012) ' A Guide to UK Oil and Gas Taxation', www.kpmglaw.no/document-file275.

24

⁴⁴ This protects owners' assets in the case of default by the company they invested in. Acceptance of this principle by businesses and governments was a vital factor in the development of equity finance, often credited with helping to drive the industrial revolution.

⁴⁵ Easterbrook, F. & Fischel, D, (1985) 'Limited Liability and the Corporation', *University of Chicago Law Review*, 52, pp 89-117.

⁴⁶ Benefits arising from any activity that do not accrue to the entities carrying out that activity.

civil liability regimes in place and the health of the oil and gas industry in Focal States. If such a relationship did exist - i.e. if firms operating in less stringent liability regimes benefitted from a competitive advantage over those in more stringent regimes – the absence of a level playing field for civil liability might raise EU competition questions.

2.9 **Beyond territorial waters**

Preliminary research for the European Commission⁴⁸ did not locate laws to extend jurisdiction for the relevant civil legislation for offshore accidents to the Continental Shelves and Exclusive Economic Zones in certain Focal States. This raised the possibility that at least some have not enacted such legislation, a legal loophole that may hamper redress for civil damage resulting from offshore activities in some Focal States.

Nevertheless, there is case law that suggests any litigation over the issue would be resolved in a manner favourable to claimants. A landmark judgement of the International Court of Justice 49 found that a coastal State has rights in respect of the area of the continental shelf by virtue of the coastal State's sovereignty over the land and by extension of that sovereignty in the form of the exercise of sovereign rights for the purposes of the exploration of the seabed and the exploitation of its natural resources. Any installations and devices on the continental shelf are therefore under the jurisdiction of the coastal State.⁵⁰

2.10 Transboundary compensation: Jurisdiction and applicable law

The sections above have highlighted that there are sometimes significant differences between the liability regimes of Focal States. As offshore accidents can have a large geographical footprint and cross the waters of many countries, this raises the question of how claimants in countries outside of the country of the origin of the accident will be treated under the law. The following section looks at the legal framework for liability for transboundary damage resulting from offshore accidents.

In any case of transboundary compensation, three interdependent questions of private international law must be resolved:

- 1. Jurisdiction: Which court/s should try the case?
- 2. Choice of law: What law/s should that court apply?
- 3. Foreign judgements: Will a judgment be recognised or enforced in another country?

Whilst some of these issues are resolved by individual countries' conflict of laws rules, many are the subject of international conventions.

As for the EU Member States, the Brussels I Regulation on jurisdiction and the recognition and enforcement of judgments⁵¹ and the Rome II Regulation on the law applicable to non-contractual

⁴⁸ BIO by Deloitte (2014), Civil liability, financial security and compensation claims for offshore oil and gas activities in the European Economic Area, Final Report prepared for European Commission – DG Energy.

⁴⁹ North Sea Continental Shelf (F.R.G. v. Den.; F.R.G. v. Neth.), 1969 I.C.J. 3 (Feb. 20) http://www.icj-

cij.org/docket/index.php?sum=295&code=cs2&p1=3&p2=3&case=52&k=cc&p3=5.

See also Case C-37/00 Weber v Universal Ogden Services Ltd. [2002] ECR I-02013, http://eurlex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:62000CJ0037&qid=1412947852756&from=EN.

⁵¹ Council Regulation (EC) No 44/2001 of 22 December 2000 on jurisdiction and the recognition and enforcement of judgments in civil and commercial matters. OJ L 012 (16 January 2001), http://eurlex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2001:012:0001:0023:en:PDF.

obligations⁵² are two EU regulations that respectively determine the court having jurisdiction and the conflict of law rules in transboundary claims for third party damage.

As regulations, Brussels I and Rome II are directly applicable. They can be invoked and relied upon in the national courts of the Member States bound by them and these courts must interpret them in line with their wording and purpose. While the Brussels I Regulation applies to all the Member States (including Denmark, on the basis of a 2005 parallel agreement between the Union and Denmark⁵³), the Rome II Regulation applies to all the Member States with the exception of Denmark. The rules of the Brussels I Regulation have been extended to Switzerland, Norway, and Iceland on the basis of the 2007 Lugano Convention⁵⁴ on the same subject. It should be noted that the Brussels I Regulation and the Lugano Convention generally apply whenever the defendant in legal proceedings is domiciled in the EU/EEA; if the defendant is domiciled in a third State, national law applies.

The general jurisdiction rule under the Brussels I Regulation (Article 2) of the Brussels I Regulation is that civil legal proceedings must be brought before the courts of the Member State where the defendant (e.g. the operator of the installation) is domiciled. In addition, Article 5 of the Brussels I Regulation provides for alternative jurisdictional grounds:

- Article 5(3) states that civil non-contractual or tort claims may be tried "in the courts for the place where the harmful event occurred or may occur". There is an extensive ECJ case law on the meaning of 'the place where the harmful event occurred or may occur' which tends to interpret this article in terms that are favourable to victims. ⁵⁵ Claimants/victims may choose to bring proceedings before the courts of the country where the damage originated or the courts of the country where the damage was sustained. In case the injured party sustained damage in multiple States, the courts of the place where the event giving rise to the damage occurred and the court of the State of the defendant's domicile have jurisdiction to hear the action regarding all damages caused by e.g. an oil spill, wherever such damages have occurred. The courts of the place where the damages are sustained, on the other hand, only have jurisdiction with regard to damage sustained in its own (the forum) State.
- Under Article 5(4), if the civil claim for damages is brought on the basis of an act giving rise to criminal proceedings, the victims could also bring the case in the court seised of those proceedings, to the extent that the court has jurisdiction under its own law to hear civil proceedings.

The court with jurisdiction will determine the law applicable to the dispute on the basis of the Rome II Regulation. Article 4 of the Rome II Regulation contains the general rule on applicable law regarding non-contractual liability. The governing law will be the law of the country in which the damage

recognition and enforcement of judgments in civil and commercial matters, OJ L 299, 16.11.2005, http://eurlex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L .2005.299.01.0061.01.ENG.

 $\frac{\text{http://ec.europa.eu/world/agreements/prepareCreateTreatiesWorkspace/treatiesGeneralData.do?redirect=true\&tr}{\text{eaty}Id=7481}.$

⁵² Council Regulation (EC) No. 864/2007 on the law applicable to non-contractual obligations. OJ L 199/40 (31 July 2007), http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32007R0864&rid=1. Non contractual law is the law which determines whether one who has suffered a damage can on that account demand reparation from another with whom there may be no other legal connection than the causation of damage itself.

⁵³ Agreement between the European Community and the Kingdom of Denmark on jurisdiction and the recognition and enforcement of judgments in civil and commercial matters. OLL 200, 16.11, 2005, http://eur.

⁵⁴ Convention on jurisdiction and the recognition and enforcement of judgments in civil and commercial matters, 2007,

⁵⁵ Case 21/76 Bier v Mines de Potasse d' Alsace [1976] ECR 1735, http://curia.europa.eu/juris/showPdf.jsf?text=&docid=89372&pageIndex=0&doclang=EN&mode=lst&dir=&occ =first&part=1&cid=438806.

occurs, irrespective of the country in which the event giving rise to the damage occurred. Article 7 of the Rome II regulation specifically addresses "environmental damage or damage sustained by persons or property as a result of such damage". According to this article, a person seeking transboundary compensation for such damage within the EU can choose whether to base the claim on either the law of the country where the damage occurred or on the law of the country where the event giving rise to the damage took place. This law shall apply irrespective of whether it is the law of a Member State or of a third country.

The parties to a dispute may also agree on the law applicable to their dispute, subject to certain limitations and conditions contained in Article 14 of the Rome II Regulation. For example, unless they are both pursuing a commercial activity, such an agreement can only be entered into after the event giving rise to the damage and not before.

The Rome II Regulation only determines which national law shall be applied. The national law designated by the conflict rule will then provide the answer to questions such as: what is the basis and extent of liability, what are the grounds for exemption from liability, the assessment of damage claimed, who are the persons entitled to compensation and what is the manner in which an obligation may be extinguished. The national laws of Member and third States differ on these matters. The application of Rome II therefore means that, depending on where a lawsuit is brought, the courts of a Member State which apply the Rome II Regulation may apply a foreign law which differs from the law applicable in their own country. As such, courts may recognise claims for pure economic loss even if in their own country such loss would not give rise to compensation or the level or scope of compensation for pure economic loss may be different. The same would be true for the determination of the amount of recoverable damages, which may also differ depending on the applicable law.⁵⁶

Recital 25 of the regulation outlines the reasoning for giving the victim a unilateral choice between the two laws most closely linked to the damage:

Article 174 of the Treaty, which provides that there should be a high level of protection based on the precautionary principle and the principle that preventive action should be taken, the principle of priority for corrective action at source and the principle that the polluter pays, fully justifies the use of the principle of discriminating in favour of the person sustaining the damage.

Regarding accidents on the continental shelves or exclusive economic zones of Member States, the ECJ case law seems to indicate that for the purposes of applying EU law, the territories of the Member States comprise their respective continental shelves and exclusive economic zones. In the context of an employment dispute, the ECJ held that: "work carried out on fixed or floating installations positioned on the continental shelf, in the context of the prospecting and/or exploitation of natural resources, is to be regarded as work carried out in the territory of that State for the purposes of applying EU law"57 (see also Section 2.9). Therefore, it may be assumed that Member States' courts may have jurisdiction and their laws may apply if an accident occurred on their respective continental shelve or in their exclusive economic zone.

⁵⁷ Case C-347/10 Salemink [2012],

⁵⁶ See Wall v Mutuelle de Poitiers Assurances [2014] EWCA Civ 138, paragraph 17 (Court of Appeal) (England) (quoting Andrew Dickinson, The Rome II Regulation; A Commentary, paragraph 14.19 (Oxford University Press, 2009)); available from http://www.bailii.org/ew/cases/EWCA/Civ/2014/

http://curia.europa.eu/juris/document/document.jsf?text=&docid=118001&pageIndex=0&doclang=EN&mode=1 st&dir=&occ=first&part=1&cid=439632.

It is important to note that the Brussels I and Rome II Regulations ensure access to the Union courts and determine the applicable law for any claimant in proceedings pending before the courts in the Union, irrespective of whether such claimant is from an EU Member State or from a third State. This means that, for example, Norwegian victims of an offshore accident which took place in the UK may launch claims for damages before the UK court (as the place where the event giving rise to the damage occurred). The UK court may apply Norwegian liability rules (as the law of the place where the damage occurred). At the same time, because of the territorial scope of application of the Rome II Regulation, victims located in the EU, while they have access to the Norwegian courts (pursuant to the Lugano Convention) may not have the same rights before Norwegian courts. For example, victims in the UK suffering damage as a result of an offshore accident in Norway may initiate proceedings in Norway but their ability to invoke the liability regime of the UK is subject to the conflict of law provisions applicable in Norway.

The Brussels I and Rome II Regulations provide important avenues for settling conflicts of jurisdiction and conflicts of laws questions in the context of transboundary claims for damage caused by offshore accidents in a way that is favourable to victims, without introducing EU-wide liability legislation. One limitation, however, lies in the applicability of Rome II, which does not apply to Denmark or Norway – two countries which together are responsible for half of all oil and gas production in the EEA. Although Denmark is an EU Member State, it does not generally participate in EU civil justice matters.

2.11 Conclusions

Whereas the law in Focal States always provides for claims for bodily injury and property damage from offshore accidents, there are significant differences regarding the standard of liability (strict or fault-based) and liability for economic loss.

Civil liability for offshore accidents in most Focal States is limited by legal proof of negligence, requirements on the directness of economic loss suffered and/or an outright bar on the payment of compensation for economic loss in the absence of bodily injury or property damage (the "exclusionary rule"). Ambiguity in the relevant legal texts may also make some economic loss claims uncertain.

In Denmark, France, Iceland and the Netherlands compensation for damage and loss, including pure economic loss, is available through either tort law or specific pollution legislation. Fewer limitations apply stemming from the need to establish proof of negligence or directness provisions. A degree of ambiguity in the relevant legal texts may, however, still make some economic loss claims uncertain.

Norway has put in place comprehensive legislation to deal with civil liability for offshore pollution. This imposes strict liability for bodily injury, property damage and economic loss, including pure economic loss, albeit with limitations stemming from the need to establish that the economic loss suffered was sufficiently direct. It also specifically states that "financial losses incurred by Norwegian fishermen as a result of the petroleum activities" are compensable.

Whilst UK authorities require membership of OPOL, there are questions as to how binding and comprehensive coverage under OPOL may be in practice. Issues include the fact that the liable operators themselves decide whether claims made against them are valid and the current liability cap on compensation.

Likewise, the reliance of Greece and Cyprus on contractual law to complement their Civil Codes has some drawbacks. Only the State has the right to require the licensee/lessee to carry out its obligations

under the contract. Claimants do not have any rights under the contracts, so would need to persuade the State to act on their behalf. Further, the contractual provisions do not specify the type of claims that are covered.

We therefore see that while the law in Focal States provides for claims for bodily injury and property damage from offshore accidents, there are differences between Focal States regarding liability for certain kinds of more remote or indirect economic loss. This has implications for the fishing and tourism industries, as well as other sectors that rely on the good condition of the shared marine environment for doing business. Experience has shown that in these sectors, which include many SMEs, could suffer significant economic loss in the event of a major offshore accident.

Legal proof of negligence for bodily injury, property damage and economic loss is another area where Focal States differ from one another. Offshore accidents mostly fall under the tort law of Focal States and therefore the negligence rule usually applies. Here, claimants must prove the negligence of wrongdoers (tortfeasors) in order to win damages and courts rule on whether the liable party breached a standard of care. The negligence rule helps to ensure negligent acts are penalized more severely, but it increases the burden that claimants face in establishing liability.

Strict liability for accident damage and loss incentivises firms to carry out their operations with even greater care. Whilst not practicable or desirable for general application, strict liability may have benefits when applied to offshore accidents because it reduces the ability of firms to unduly benefit from the difficulty of establishing legal proof of negligence to avoid paying out for legitimate claims. In addition, it reduces the transaction costs to both liable parties and claimants by speeding up compensation – essential for lowering total accident costs where a great number of victims are affected.

The Focal States thus limit civil liability for offshore accidents in different ways and to different degrees. Holding firms accountable for *all* damage and loss caused by offshore accidents – including pure economic loss, and damage and loss where claimants cannot prove negligence –facilitates access to justice for victims. It incentivizes firms to take adequate precautions and develop safer ways of operating. It also helps ensure that offshore activities only take place if their benefits outweigh their risks.

Notwithstanding this, there are good grounds for limiting liability that allow a principled understanding of how, and to what extent, it could be done in this context.

First, oil spill claims litigation can be complex and a practical balance needs to be struck between the need to compensate victims and preventing the payout of illegitimate claims. Economic losses are likely to be serially linked to one another in the economy and so setting well-defined liability parameters is essential to preventing excessive liability – also known as the floodgates issue – even though this may result in the exclusion of the most indirect, speculative claims.

Limiting liability may also be beneficial if it brings significant benefits to enterprise without effectively resulting in increased accident costs. Offshore oil and gas is a high-value sector that contributes to jobs, tax revenues, energy security and the trade balance, each of which can be considered an external benefit. Introducing certainty on levels of financial responsibility will lower the costs of doing business for many offshore firms. Although it may also reduce the financial incentive for greater precautions, there have been no major offshore accidents in Europe for a number of years and the EU offshore industry operates under increasingly stringent regulations.

Whatever the pros and cons of the different liability regimes in Focal States, the Brussels I and Rome II regulations help safeguard the interests of claimants for accidents that originate in jurisdictions with less stringent civil liability rules than in the claimants' jurisdiction. They help ensure that both the benefits and the consequences of Member State choices on liability fairly accrue to these Member States alone, which may reduce the impact of the current lack of a level playing field.

3 FINANCIAL SECURITY INSTRUMENTS AND THEIR AVAILABILITY

The 2010 Deepwater Horizon disaster showed that worst offshore accidents can cost so much that only the very largest companies would be able to cover their costs. This raises questions about whether financial security instruments exist to handle this risk.

This chapter presents an overview of the financial security instruments available for offshore accidents, as well as a look at how public authorities could improve the provision and utility of such instruments. For the purposes of this document, the analysis shall include all forms of risk pooling, including industry mutual schemes. While such schemes may not be traditional financial instruments *per se*, they provide the same kinds of risk management services offered by many financial products.

From the operator's point of view, the primary function of a financial security instrument is to redistribute risk so that the costs of more infrequently occurring major accidents are spread into smaller, more manageable payments and business can continue uninterrupted. From the point of view of victims, financial security instruments help ensure that compensation is available. Whilst financial security instruments may also reduce risk somewhat – for example, by reallocating it to less risk-averse entities, or by introducing an additional layer of mutual monitoring – they cannot completely insulate companies from the risks they take.

Viewed in this light, a major objective of this chapter is to address whether an 'adequate' market exists for the financial security instruments that oil and gas companies need to manage their operating risks. One relevant point here is the competitiveness of this market, so that products are available at prices close to the cost of the risk being insured. Another is the diversity of available products, as companies in the oil and gas sector have a broad range of needs that vary according to their size and activities. And finally, the market should have the capacity to spread the risk of the largest, most infrequent accidents in the sector. The presence of such a market is key to ensuring that damage is remediated and an industry with many economic benefits remains healthy.

However, there are limitations to the conclusions that can be drawn from the analysis presented in this Chapter. Chapter 1 has shown that liability for certain losses simply does not exist in much of the EEA. It would make little sense for an oil and gas company to have financial security for a liability that does not exist in the jurisdiction in which it is operating. Likewise, it would make little sense for providers of financial security instruments to develop products to cover such a liability.

3.1 The financial security instruments available on the market

Companies in the oil and gas sector have a broad range of financial security needs that vary according to their size and activities. This section provides a broad overview of the options available to them for managing their exposure to liabilities from offshore accidents.⁵⁸

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⁵⁸ A more detailed examination can be found in De Smedt, et al. (2013), Civil Liability and Financial Security for Offshore Oil and Gas Activities, Maastricht European Institute for Transnational Legal Research - METRO, Maastricht University, pp. 173-282, and BIO by Deloitte (2014), Civil liability, financial security and compensation claims for offshore oil and gas activities in the European Economic Area, Final Report prepared for European Commission – DG Energy, pp.127-163.

Text Box 3: First- and third-party financial instruments

First-party financial security instruments:

- Self-insurance (corporate net worth or other financial criteria);
- Captives; and
- Guarantee by a parent or other company.

Third-party financial security instruments:

- Insurance;
- Pools: (re)insurance pools; mutuals for industry sectors; government-sponsored pools;
- Bonds: catastrophe (cat) bonds or other types of bonds by banks or sureties; and
- Guarantees: letters of credit; trust funds; other types of bank guarantees.

A distinction must be made between first- and third-party instruments and mechanisms, the differences in which are described in Text Box 3. Most businesses use a combination of traditional instruments and self-insurance (purchasing primary and excess liability insurance in the international marine insurance market). In addition, there are many interactions between these instruments, which have the benefit of spreading the risk among various players, thereby increasing the available capacity. Indeed, because liabilities from offshore oil and gas operations may run into billions of euros, there may be no single insurer willing to cover the entire risk exposure.

Most major oil and gas companies rely on first-party instruments, such as self-insurance or a captive, because their balance sheets and asset bases are generally larger than those of the insurance companies from which they would obtain coverage.

Self-insurance (in contrast to a captive, see below) is usually created by setting up a 'reserve fund' for unanticipated events (including accidental damage). This can be described as a relatively large savings account into which the self-insuring company deposits an amount of capital to serve as a financial base to call upon if an adverse event occurs. Self-insurance is usually chosen over traditional insurance if it allows the company to insure itself more cheaply that obtaining cover on the commercial insurance market, where insurers charge for the service they provide.

If a company is sufficiently large, it may establish, and thus obtain insurance from, a **captive insurance company**. ⁵⁹ Captives are an alternative to traditional commercial insurance, set up with the sole function of financing risk for their parent company, its operating affiliates and sometimes its partners. ⁶⁰ Specialist teams of brokers, sometimes from the major brokerage firms, may run a captive for a company. Captives may purchase reinsurance to reduce the likelihood of having to pay a large obligation resulting from an insurance claim. ⁶¹

Most multinational oil companies have set up a captive (e.g. Total, Shell, ConocoPhillips). The level of insurance which can be provided by a captive is driven by the level of the captive's capital/assets and any reinsurance arrangements. Joint captives also exist to cover more than one company. They are generally established to cover risks for which it is difficult to obtain cover on the commercial

http://ec.europa.eu/environment/enveco/others/pdf/implementation_efficiency.pdf

⁵⁹ BIO Intelligence Service (2009). Study on the Implementation Effectiveness of the Environmental Liability Directive (ELD) and related Financial Security Issues. Report for the European Commission (DG Environment). In collaboration with Stevens & Bolton LLP; available at

Go Joint ventures, special purpose vehicles, and in some instances other project contractors may also be insured through captives.

⁶¹ Reinsurance is the wholesale component of the insurance market, in which insurers sell their risk to other parties. Some majors, such as BP, do not reinsure risks out of their captive.

insurance market. Jupiter, BP's captive, holds assets in excess of \$5 billion. It can provide insurance coverage of up to \$1.5 billion on a per risk basis.

The reported advantages of first-party financial security options, such as self-insurance and captive are:

- The general financial insulation from market cycle swings in the insurance business;
- The reduction of overall transactional costs of insurance;
- Greater flexibilities for coverage;
- Tax advantages (depending on the country); and
- Internationalisation of the knowledge associated with brokering insurance.

In addition, regulation in a specific country may require operators to take out insurance coverage, making captives the only option for companies able and willing to self-insure.

One final kind of first-party instrument available to larger companies, or companies with a large parent company or affiliate, are financial tests and corporate guarantees. Authorities use these to gauge the financial strength of operators and licensees to ensure that public funds will not be required to remedy the environmental damage or other harm they cause.

The **financial test** may include the following criteria: a minimum level of the regulated company's net working capital⁶² or net worth;⁶³ a minimum ratio of its current assets to its current liabilities; a minimum ratio of net income or tangible net worth to the estimated costs of complying with required works; a minimum rating for the company's bonds by a recognised rating company; or the location of a substantial proportion of the company's assets in the relevant jurisdiction. In all cases, it is likely that authorities will require data provided by the company relating to the above to be supported by a report from an independent auditor.

A **corporate guarantee** enables a company with a large parent or other affiliated company to provide the above evidence regarding its parent or affiliate on its behalf.

Companies that satisfy the financial test or corporate guarantee can do so at low cost because they do not have to purchase a financial security mechanism from a third party. The competent authority, however, must regularly monitor the company's financial position to ensure its continued financial viability.

Smaller cap companies, less able to handle offshore operating risks independently, are more likely to rely on third-party financial security instruments, such as **insurance**. In an insurance contract, the insurer accepts a fixed payment, or premium, from the insured and in return undertakes to make payments if certain events occur. Insurers may take on this risk because they are better able to spread it and are therefore less risk-averse and/or because they charge for their service (i.e. they pay out less in claims than the aggregated premiums they receive).

A wide range of commercial insurance policies is available to companies carrying out offshore exploration and production, including:

⁶² The working capital is the company's current assets minus its current liabilities.

⁶³ The net worth of a company is its total assets minus its total liabilities, that is, the equity of shareholders in the company.

- Offshore physical damage, which provides first-party cover to an insured in respect of its offshore facilities, equipment, pipelines and offshore loading;
- Hull, machinery, which provides cover to Mobile Offshore Drilling Units;
- Operator's Extra Expense (OEE) or Energy Exploration and Development (EED), which is described below;
- Land rigs and miscellaneous property, which includes contractor's equipment, scientific and sampling instruments, diving equipment and remotely operated vehicles;
- Business interruption / loss of production income;
- Public / general liability policies, which cover third party risks with (in many jurisdictions) qualified or absolute exclusions for specified environmental liabilities;
- Environmental insurance policies, which provide cover for bodily injury, property damage and clean-up costs from a pollution incident; and
- Employers' liability policies (and, where appropriate, workers' compensation policies), which
 provide cover for accidents and diseases suffered by employees resulting from their
 employment.

An OEE or EED policy provides coverage for the risks arising from a blowout. It covers: a) control of well; b) redrilling/extra expenses; and c) seepage and pollution, clean-up and contamination. The standard OEE or EED policy does not provide cover for pure economic loss. If this is needed to comply with the OPA or OPOL, it must be purchased through additional OPA or OPOL endorsements. Oil companies typically purchase cover under an OEE or EED policy of between \$100 million and \$300 million for offshore wells.

Liability insurance in the offshore oil and gas industry reportedly tends to be a very customised product. Commercial liability insurance will generally switch from a platform construction policy to an operating policy once construction is complete (and other contractual parameters are met). The insurance policy that applies to most claims for compensation for offshore pollution is the Offshore Energy Package Policy, which includes a range of covers on top of OEE / EED. Oil companies that carry out offshore exploration and development drilling typically also purchase a series of other policies not necessarily related to a specific platform, including corporate liability policies, to cover all their activities. Together, these make up a layered insurance programme.

Insurance in the offshore oil and gas industry is generally provided by the subscription market due, in particular, to the size of the risk insured. As indicated above, a single (re)insurer does not underwrite a policy. Instead, a broker will broker the policy to many subscribers who each underwrite a specified portion of the risk. Liability between the underwriters to a subscription policy is not joint and several;⁶⁷ each underwriter is liable only for its proportion of the risk, as specified in the schedule to the policy.

⁶⁴ Other endorsements include: underground control of well; extended redrill and restoration; resultant plugging and abandonment; evacuation expenses; deliberate well firing; contingent joint ventures; turnkey wells; farmout wells; developmental drilling wells; various excess cover endorsements; and windstorm endorsement.

⁶⁵ Alternatively, an equivalent programme of coverage may apply.

⁶⁶ Physical damage (to the operator's property); Pollution; Business interruption; Third party liability; Construction risk; Charterers' liability; Windstorm; Crude oil storage; Political risk; Contingent OEE/EED.

⁶⁷ When two or more underwriters are responsible for covering a single case of injury or damage.

Lloyd's is the leading subscription market⁶⁸ for (re)insurance to the offshore sector. Clients of the products sold at Lloyds have global operations, even though some national companies may operate only in one country. Lloyd's sets general terms and conditions. It is dependent on reinsurance and only provides policies on an annual basis.

The subscription market therefore provides access to insurance or reinsurance for customers and insurers. It allows for better diversification for both customers and (re)insurers, spreading risks over a larger population. However, (re)insurance pools – agreements under which each (re)insurer assumes a specified portion of risk – offer another way to achieve these same objectives.

Both the subscription market and (re)insurance pools ease access for clients, but whereas the subscription market is seen as better able to satisfy bespoke needs of clients, (re)insurance pools tend to be set up for new high value risks where the market might be unable to provide a solution. Here, expert underwriting skills are required and only a limited number of underwriters may have the requisite expertise.⁶⁹

Munich Re and Swiss Re are the largest reinsurance companies ("first tier"), but there are many other insurance or reinsurance companies ("second tier"), such as Hannover Re. These reinsurance companies are engaged in insurance as well, to a certain extent. In most reinsurance companies, the reinsurance cover operates under a one-year contract (as is also the case for insurance). Renegotiating contracts every year is a common practice in the insurance and reinsurance industry, and clients can almost always find a reinsurer for its risk, up to a certain limit and for a certain price.

Although the capacity of reinsurers can be significant, very high limits of indemnity can be difficult to provide. For instance, Hannover Re has a financial cap of \$150 million per occurrence, both for insurance and reinsurance. However, this still have fallen far short of the liabilities seen at Deepwater Horizon, which ran into tens of billions of dollars. As such, following the incident, Munich Re developed an innovative product to cover such losses for Gulf of Mexico operators: the Sudden Oil Spill coverage (SOSCover). This facility – a joint venture between Aon Benfield, Guy Carpenter, Munich Re and Willis Re – would be able to generate substantial capacity for offshore-related risks, boasting limits of \$10-20 billion for companies in offshore oil⁷⁰ activities. It is the only initiative offering this level of coverage for offshore operations, and therefore merits some description here.

As indicated in a study done for the European Commission,⁷¹ SOSCover could work under three different models:

- 1. a consortium of insurers and reinsurers, each providing uniform prices and conditions and fixed capacity:
- 2. traditional insurance or reinsurance on a subscription basis, with flexible pricing, conditions and limits; and
- 3. a pool for oil drilling companies with contributions reflecting market share.

It is a hybrid of many of the financial security instruments described in this section.

⁶⁸ A place where insurance underwriters come together to sell insurance, mainly through specialised brokers.

⁶⁹ Ernst & Young (2014), 'Study on co(re)insurance pools and on ad-hoc co(re)insurance agreements on the subscription market: New Edition July 2014', Luxembourg: Publications Office of the European Union, http://ec.europa.eu/competition/sectors/financial services/KD0414707ENN.pdf.

⁷⁰ Offshore gas activities are not included in SOSCover.

⁷¹ De Smedt, et al. (2013), *Civil Liability and Financial Security for Offshore Oil and Gas Activities*, Maastricht European Institute for Transnational Legal Research - METRO, Maastricht University, pp. 266-271.

Unlike traditional insurance coverage, SOSCover is a balance sheet protection product. Also unusual in the insurance world, it relies on parametric triggers and coverage may be seen as pay-as-you-go. It involves a scenario-based approach, which Munich Re claims makes risk more quantifiable. Munich Re further indicates that the product strictly follows liability rules and therefore is very close to a liability cover. Table 3 below summarises the main features of the product.

Table 3: Main features of SOSCover developed by Munich Re⁷²

Scope of coverage	res of SOSCover developed by Munich Re		
Insured	• Lessees and operators of federal oil and gas leases (joint venture), represented by		
Ilisui cu	operator, 100% scaling		
Insured activity			
msured activity	• All highly exposed wells on US sea territory to be insured (Gulf of Mexico, California,		
	Alaska) • Wild Cat		
ExplorationAppraisal			
AppraisalDevelopment			
■ Production			
Danila in anna d	Work-over		
Perils insured	• Coverage limited to oil spills / releases of wells (no coverage provided for vessels and		
	pipelines).		
Excluded events	• Terrorism (potential inclusion of sub-limit of 10-20% for additional premium), war.		
	• All kinds of Nat-Cat events (windstorm, meteorite impact, earthquake, seaquake, etc.) and		
	consequential events (subsea landslide, mudslide, flood wave, tsunami etc.)		
	Gradual pollution and leakage		
	Computer attacks		
	Loss of GPS signal		
ornerstones of cove	erage		
Losses covered	• Liability arising out of oil spills of insured activity (defined drilling):		
	 Clean-up and removal costs 		
	 Natural resource damage 		
	 3rd Party Property damage 		
	 Bodily injury 		
	 Loss of profits and earning capacity of related industries 		
	 Revenues and Public Services 		
	Waiver of subrogation against the joint venture's contractors		
Defence costs	Defence costs are covered and part of the limit		
	No duty to defend		
Limit	• \$10bn+ capacity, provided by an insurance consortium.		
	• Limit is in place per well and per any event, but only once per year per well and with a		
	double aggregate per insured.		
Capacity	• Capacity providers need to commit their capacity for a period of 24 months (but with an		
requests	annual right to cancel and a cancellation period of 15 months).		
	• Renewal subject to annual review of risk adequate terms and conditions.		
Retention	Attachment point of \$1.5 billion		
	• Cover will be pure excess cover, no follow form / no drop down etc.		
Trigger and	Trigger: Occurrence		
indemnification	Date of loss: Date of event		
period	Reporting: As soon as likely to involve the coverage		
_	Sunset clause: New claims after 36 months are cut off		
	Risks attaching		
	Nisks auacining		

⁷² Source: Munich Re

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Claims payment	• First part of the limit is \$1.5 billion and will be paid into an escrow fund after the entire
process	retention of \$1.5 billion is funded by the insured ("Benefit Program")
	Pay-out of the limit's other tranches ("Liability Program") after
	A) parametric trigger (defined no of claimants) and
	B) exhaustion of the limit's previous tranche
Co-insurance	• Minimum of 10% co-insurance (of \$10 billion), depending on the limit required
	Possible role of the oil companies' Captives both of retention and co-insurance
Claims Service	• A fully integrated claims facility with a clear claims management strategy is available (on
	a fee basis) as part of the product

In spite of its creativity, the SOSCover proposal has not met widespread interest. The product has not been shelved, although Munich Re has spoken of a current lack of demand from oil companies. Munich Re indicated that it could develop a similar product for Europe within 3-6 months. The reinsurer estimates that a minimum cover of \$5 billion would be necessary to cover European operations.

Associations of similarly situated oil and gas companies that insure one another, offer another means for companies in the offshore sector to spread risk. Members pay an initial premium followed by annual premiums. These mutual insurance associations may, in some cases, make a call on members for additional premiums if losses exceed the total funding held by the mutual. Mutualisation enhances insurance availability, expands the terms under which insurance is offered, diversifies risk and reduces the overall cost of insurance as policyholders of the company are also their owners/shareholders.

Criteria on the acceptance of members of mutual pools tends to be stringent because all businesses in the pool underwrite the risks of other members according to their proportionate capacity in the pool. Thus, companies that do not meet the requisite standards of members of the pool are almost certain to be refused entry due to their higher potential for incurring losses payable by the pool. This adds a layer of industry mutual monitoring that complements the regulatory scrutiny of companies' financial capacity at licensing.

Perhaps the best known example of a mutual is Protection and Indemnity Clubs ('P&I Clubs') for marine shipping risks. Thirteen P&I Clubs with worldwide activities have formed the International Group of P&I Clubs, whose main objective is to coordinate the operation and regulation of the Clubs' Pooling Agreement. The Pooling Agreement provides a mechanism for sharing all claims in excess of US\$ 9 million up to, currently, approximately US\$ 7.5 billion. However, mutuals also exist in the offshore sector, notably Oil Insurance Ltd. (OIL), which was formed in 1972, and the Oil Casualty Insurance Ltd. (OCIL), founded in 1986. Both OIL and OCIL have experienced considerable growth in the last few decades. OIL's total assets have grown from \$160,000 in 1972 to over \$7bn in 2013. From 2002 to 2012, OCIL registered an increase in its number of worldwide shareholders from 75 to 113, of which 12 are currently situated in Europe.

Financial security for offshore liabilities may also come in the form of various **guarantees**. **Trust funds** administered by a trustee on behalf of a government authority may ensure that capital is readily available to compensate victims and remediate any accident damage caused by an operator or licensee. **Letters of credit** from a financial institution may serve the same purpose, provided the operator or licensee it is issued on behalf of can provide the requisite collateral, as do **bank guarantees** to cover liabilities in the event the operator or licensee fails to do so in the first instance.

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⁷³ A number of P&I Clubs have recently expanded into the offshore sector, providing a range of fixed-premium insurance products to offshore activities.

Many stakeholders have highlighted that the traditional insurance market may not have the capacity to cover the greatest offshore risks fully. The **alternative risk transfer** (ART) mechanisms briefly described in the remainder of this section provide access to other sources of capacity and thus offer a further means for offshore companies to hedge operating risk. Essentially, ART mechanisms turn an insurance policy or reinsurance contract into a financial security that is then transferred to investors in the capital markets. This helps to expand the set of possible insurable risks and provide coverage that may not be available from traditional sources. Additionally, because the resources of the capital markets are many times greater than those of insurers, ART solutions can also greatly increase capacity.

Reinsurance sidecars are special purpose vehicles sponsored by reinsurers to provide additional capacity; they access capital markets directly through private debt and equity investment. A ceding reinsurer forms the sidecar and capital raised by the sidecar is held in a collateral trust for the benefit of that reinsurer. The ceding reinsurer then enters into a reinsurance contract with the sidecar, paying premiums to it for the reinsurance underwritten. The sidecar is usually owned by a holding company, which raises capital for the sidecar by issuing equity and/or debt. Private equity, hedge funds, insurers and reinsurers provide the capital for the typical sidecar. In fact, the growth of the sidecar market has been significantly driven by hedge funds seeking attractive non-traditional sources of investment yield.

Catastrophe (cat) bonds provide insurance companies with a closely related risk management option that leverages capital markets for insurance purposes. Funds raised from investors are used to establish a special purpose entity (SPE) or a special purpose reinsurer (SPR), which acts as the administrator of the security issuance. The SPE/SPR then issues a reinsurance policy to the insurer or corporation ceding the risk, which pays a premium to the SPE/SPR. Through an investment bank, investors receive bonds from the SPE/SPR with an agreed-on interest payment drawn from this premium.⁷⁴ In the event of an accident, proceeds are released from the SPR/SPE to help the insurer pay claims; the release of funds is usually proportional to the size of the accident and the investors are not fully repaid. If no contingent event occurs, the principal is returned to the investors upon the expiration of the bonds.

Like cat bonds, **contingent capital** leverages financial markets to protect an insuring company against perils while offering a profit to counterparties in these markets. Unlike cat bonds, however, contingent capital: a) is financed directly by the insuring company without an intermediary; b) spreads risk over time rather than transferring it; and c) finances a loss after the event has occurred.

Similarly to a put option,⁷⁵ a contingent capital agreement allows an insurer to issue capital (e.g. common stock, hybrid capital, or debt) to a financial counterparty at a predetermined strike price following the occurrence of a defined catastrophic event (for instance if the insurer's stock price falls below the strike price following a windstorm of specified strength). In exchange for a fee, the insurer is thus assured of a cash infusion at its time of greatest need. Considered useful in financing low-frequency/high-severity exposures, the benefits of contingent capital include a low up-front option fee, balance sheet protection when it is most needed and access to financing with neither a corresponding increase in leverage nor a dilution of shareholders' equity.

We therefore see that there is broad variety of financial security products available to hedge oil and gas companies' operating risk. Whilst not all the products discussed may be in widespread use by oil

⁷⁴ As well as any reinvestment earnings the SPE/SPR receives through a financial intermediary.

⁷⁵ Financial contracts that give the owner the right to sell a security at a predetermined price.

and gas sector clients at this time, the marketplace notionally offers the depth and innovation to cater to all offshore operators under current legal liability obligations. It also allows oil and gas companies to spread their risk to a diversity of market actors, from insurers and reinsurers, to financial market actors such as private equity groups and hedge funds, as well as to other oil and gas companies.

3.2 The financial security instruments accepted by authorities

An important distinction needs to be made between (i) financial security instruments and/or mechanisms that may be available to licensees in EEA waters for third-party damage from offshore oil and gas activities and (ii) those that are acceptable and accepted by competent authorities in the 20 Focal States for compensation for such damage. Table 4 below summarizes the latter. It is based on the findings of a study done for the European Commission to address the subject. Annex IV of this document provides a more detailed description of these findings.

Table 4: Financial security instruments accepted by competent authorities to cover third-party damage from offshore oil and gas activities

oil and gas activities	
Target State	Legislative financial security requirement
Bulgaria	Not specified but permit or concession agreement may require insurance
Croatia	Insurance
Cyprus	Insurance
Denmark	Insurance
France	Not specified
Germany	Insurance
Greece	Insurance
Iceland	Insurance, performance bond or other type of financial security acceptable to the competent
	authority
Ireland	Insurance, with competent authority having discretion not to require financial security, or to
	require another type of financial security
Italy	Not specified
Latvia	Not specified but licences may require financial security
Lithuania	Not specified but production sharing agreement may require financial security
Malta	Model production sharing contract specifies insurance as a financial security instrument
Netherlands	Not specified; financial security is rarely imposed
Norway	Insurance
Poland	Type of financial security, and whether it is required, is decided on a case-by-case basis
Portugal	The concession contract specifies insurance for civil liabilities to the State and third parties
Romania	Not specified but permits may require financial security
Spain	Insurance
UK	Specified credit ratings, parent company guarantee, insurance, or a combination of them

We see that although there are a wide range of financial security instruments for offshore operating risk notionally available on the market, the majority of Focal States have only one preferred mechanism for compensation for claims for traditional damage – insurance. Twelve Focal States specify insurance, of which nine do not specify any other type of financial security mechanism. This high proportion of Focal States that require insurance may be even higher because the model contractual agreements for six Focal States were not available for review.

Regulators' focus on insurance as the preferred form of financial security for civil liabilities contrasts with the mechanisms that may be selected to meet the obligations of a licence or contractual

⁷⁶ BIO by Deloitte (2014), *Civil liability, financial security and compensation claims for offshore oil and gas activities in the European Economic Area, Final Report prepared for European Commission – DG Energy.*⁷⁷ Croatia, Cyprus, Denmark, Germany, Greece, Norway, and Spain.

agreement. The most common financial security instruments required for such obligations are bank guarantees, performance bonds, insurance and, if appropriate, parent company guarantees. Furthermore, applicants for licences usually have more than one instrument from which to choose.

3.3 Conclusions

There is broad variety of financial security products available to hedge oil and gas companies' operating risk. Whilst not all of these products may currently be in widespread use by the offshore industry, the marketplace for them notionally offers the depth and innovation to cater to all offshore operators. It also allows oil and gas companies to spread their risk to a diversity of market actors, from insurers and reinsurers, to financial market actors such as private equity groups and hedge funds, as well as to other oil and gas companies.

In spite of this, there is currently a lack of uptake of financial security instruments to cover all damage from the most infrequent and costly offshore accidents. There could be several reasons for this, one of which has already been discussed in Chapter 1 of this Document: Liability for certain losses simply does not exist in much of the EEA, making such products unnecessary.

In addition to this, regulators may not require appropriate levels of coverage. Coverage may be beyond individual insurers' capacities, or the availability of reinsurance on the market. Alternatively, where coverage is available, insurers and the offshore industry may be unable to agree on risk levels and therefore a price for these products, leading to their non-provision.

However, it is too early to gauge the significance the abovementioned barriers because most EEA regulators limit what forms of coverage they accept, precluding outright the provision of a range of innovative solutions.

The experience of implementing the Environmental Liability Directive in national law shows that a competitive market for insurance products – pools, insurance, bonds, guarantees etc. – takes time to develop following the introduction of new regulatory requirements.⁷⁸

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⁷⁸ Report from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions under Article 14(2) of Directive 2004/35/CE on the environmental liability with regard to the prevention and remedying of environmental damage, 12/10/2010, COM(2010) 581 final.

4 HANDLING COMPENSATION CLAIMS

This chapter presents an overview of the legislative and non-legislative compensation schemes for offshore accidents in Focal States. Compensation and liability are strongly linked. Whereas the liability regimes discussed in the previous chapter provide the legal framework for the kinds of damage that are compensable, the compensation regimes covered in this chapter focus on how this legal framework is practically implemented through rules and procedures.

Major offshore accidents can affect a large number of people and stretch the resources of any scheme set up to process claims and provide compensation to victims. Insurers have vast expertise and experience in handling claims from accidents, including claims for manmade and natural catastrophes. Self-insured companies can also be expected to have a wealth of relevant knowledge in house.

If a major offshore oil and gas incident were to occur in the waters of any of the Focal States, insurers and liable companies would therefore be likely to lead the compensation process. However, these players may not have the confidence of victims due to the perception that they have a direct financial interest in minimising payouts. For example, BP was criticised for its initial handling of claims from Deepwater Horizon, leading to the establishment of the GCCF.

Without an adequate compensation regime in place *a priori*, authorities have resorted to *ad hoc* measures when faced with compensation grievances following a major accident. However, these measures risk neither serving the best interests of victims nor balancing the legitimate interests of the liable party. Potentially lengthy and costly judicial channels of compensation are the alternative. It is therefore important that well thought through compensation mechanisms are put in place proactively before major accidents occur.

There may be several relevant criteria for offshore accident compensation schemes, centred on fulfilling citizens' expectations to the greatest practicable degree. These may include the existence of an independent claim-handling regime which legitimate victims of offshore accidents can have confidence in.

Given that a major accident may cause damage and loss in more than one state, regimes should be able to address transboundary claims effectively and without discriminating between claimants from different EEA member countries.

Adequate levels of compensation for loss, damage or disruption is also relevant, as well as a quick route to payment that bypasses the tort system where it would result in significant delays to compensation.

A clear, well-defined and accessible procedure for registering and proceeding with claims is also important. This calls for detailed and actionable guidelines that encompass the whole process of claims management (registration, handling and settlement) and reduce the number of bureaucracies involved to the bare minimum.

Regardless of where the accident took place, the best claims procedures would ensure that victims of offshore accidents have a clear idea of who is accountable for claims management at all times. Clarity over who bears the cost of administering the process is also desirable.

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⁷⁹ The rules that courts follow for adjudicating civil lawsuits.

Pre-defined timing obligations on the claimant and the liable party may also be effective in minimizing delay.

Finally, it is appropriate that victims have access to a process of redress if there are failures in the system.

The presence of a compensation system that effectively incorporates these features to the greatest practicable degree would be in the societal interest as it minimises cost of damage, which tend to rise sharply with time following an accident, and ensures that firms cannot unduly benefit from legal process to minimize or delay the payout of legitimate damages.

4.1 Compensation schemes for offshore accidents in Norway

To date, Norway is the only EEA member country to establish a legislative compensation mechanism specifically to deal with offshore accidents. Chapters 7 and 8 of its Petroleum Activities Act codify rules for managing claims and compensation to fishermen.

Chapter 7 of the Act establishes special procedures for expediting and aggregating claims for compensation. It explicitly applies to transboundary claims from Denmark, Finland and Sweden, as established by the 1974 Nordic Environmental Protection Convention. 80. Section 7-7 provides that, unless it is obviously unnecessary, the operator who caused the pollution damage shall make weekly public announcements in the "Norwegian Gazette (*Norsk Lysingsblad*) and in newspapers and other publications which are generally read in those places where damage is caused, or is presumed to occur". The announcements will include the identity of the person to whom the claims should be submitted and the deadline for their submission. The Ministry may provide for a shorter limitations period than the prescribed period. Claims for pollution damage are brought in the court in the district in which petroleum was discharged or in which the damage was caused. The Ministry is authorised, however, to aggregate all the claims in a single court.

Chapter 8 of the Petroleum Act specifically provides for claims for compensation by "Norwegian fishermen", defined as "persons registered in the registration list of fishermen and owners of vessels listed in the registry of Norwegian fishing vessels subject to registration licence" (Section 8-1). Section 8-3 provides that a licensee is strictly liable for financial loss suffered by Norwegian fishermen resulting from pollution and waste from petroleum activities. The financial loss includes:

- the reasonable cost of measures taken by fishermen to avert or limit the damage or loss;
- any financial loss from such measures;
- damage and inconvenience as a result of supply vessels and support vessel traffic; and
- relocation of the facility to or from the relevant fishing field.

Claims for pollution damage from offshore oil and gas operations must be brought under the Norwegian Petroleum Act. If the Petroleum Act does not apply to a claim, the claim may be brought under the Pollution and Waste Act or the Act Relating to Compensation in Certain Circumstances, as applicable.

The Petroleum Act thus establishes several legal requirements for compensating offshore accidents, including some transboundary claims. It also recognises the interests of the fisheries industry and the

42

⁸⁰ Nordic Environmental Protection Convention (1974) http://www.ecolex.org/server2.php/libcat/docs/TRE/Full/En/TRE-000491.txt

offshore oil and gas sector and has established a liability system to handle potential conflicts. However, the Act does not cover key issues, including equal opportunity for non-Nordic claimants to gain compensation. Nor does it specifically cater for claims by sectors other than the fishing industry.

4.2 OPOL

Although it is a non-legislative regime, OPOL outlines procedures aimed at expediting claims without the resort to court proceedings. The scheme's Guidelines for Claimants state that:

OPOL is intended to encourage prompt remedial action by operators of offshore facilities in the event of a spill.

OPOL intends that all admissible claims associated with a spill should be settled in an orderly and expeditious manner without recourse to the Courts and avoiding complicated and lengthy jurisdictional problems. ⁸¹

Clause V of the OPOL Liability Agreement⁸² specifies that claims must be made in the first instance to the liable operator, describing what information should be included in such claims. Clause VI specifies that claimants have a year from the incident to make their claims and Clause IX stipulates that arbitration shall be the sole means of settling disagreements. Part IV of the OPOL Rules (a separate document) stipulates that claimants should address the organisation if the liable operator fails to compensate their initial claim, after which the organisation decides whether the rest of its members should chip in to guarantee these costs.

As the UK requires membership of the scheme and membership satisfies Ireland's offshore licensing terms, OPOL could play an important role in accident compensation in these Focal States. However, the OPOL Liability Agreement only offers a basic outline of a claims procedure, which does not fully address the criteria for compensation schemes mentioned at the start of this chapter.

OPOL does provide a clear and simple claims procedure, and clear accountability for claims management responsibility. It also specifies arbitration under the Rules of Arbitration of the International Chamber of Commerce as a means for redress in the case of system failures. However, it does not explicitly address transboundary claims, nor does it oblige liable parties to deal with claims swiftly.

Most crucially, OPOL does not provide an independent claim-handling mechanism. Instead, it makes the liable operator responsible for deciding whether claims against them qualify as "pollution damage" and whether these claims are "reasonable, quantifiable and justifiable" under the OPOL Liability Agreement (see Section 2.9). Given the ambiguity of these terms and the inherently conflicting interests of claimants and liable parties, the scheme may fall short of citizens' expectations.

4.3 Civil rules of procedure

In the absence of a purpose-built compensation scheme, claims for damage from an offshore oil and gas accident would proceed under tort law. Here, civil rules of procedure apply – the rules that courts follow when adjudicating civil lawsuits.

OPOL (2014) 'Guidelines for Claimants', http://www.opol.org.uk/downloads/opol-guidelines-jan14.pdf.
 OPOL (2014) 'Offshore Pollution Liability Agreement ("OPOL") (amended in Extraordinary General Meeting on 28 October 2013 to take effect on 1 January 2014)', http://www.opol.org.uk/downloads/OPOL-Agreement-01Jan14.pdf.

Lawsuits can be complex legal processes at all stages, from the commencement of action, to the discovery and presentation of evidence, to the eventual resolution of the dispute either through a negotiated settlement, arbitration or a trial. During this process, there is great scope for claimants and tortfeasors alike to challenge claims and appeal judgements made against them, meaning that cases of ordinary litigation can be expected to last for between six months (at the very least) and several years. This timescale can be even longer in 'big cases' – group litigation actions involving very large damage amounts.

Oil and gas industry stakeholders have highlighted that many EU Member States have recently adopted, or are debating, new legislation to simplify the recourse of claimants under the civil rules of procedure. Notable examples include collective action (class action) rules in Belgium, ⁸³ France, ⁸⁴ Italy, ⁸⁵ Portugal, ⁸⁶ the Netherlands ⁸⁷ and the UK. ⁸⁸ Furthermore, the Commission adopted a non-binding Recommendation in 2013 covering collective redress in the areas of competition claims, consumer protection, environmental protection and data privacy. ⁸⁹

Nevertheless, there have not been sweeping changes in this area and the civil rules of procedure in Focal States could be streamlined further to better handle large-scale offshore accidents. Moreover, some of the national changes noted above focus on areas of the law that may only partially cover the mass claims expected following an offshore accident, ⁹⁰ or not be relevant. ⁹¹

A one-size-fits-all approach to compensation has its limits. In particular, whilst the civil rules of procedure help ensure a fair outcome in ordinary litigation, they may work against the large number of claimants who may depend on swift compensation following a major offshore accident for their livelihoods. Purpose-built compensation schemes can be tailored to better address the specific forms of damage an offshore accident might cause and the needs of the sectors likely to be affected – fishing and tourism, in particular.

4.4 Conclusions

There are two compensation mechanisms currently in place specifically for offshore accidents in the Focal States and they may not comprehensively address several key issues.

44

Loi sur l'action en reparation collective/Wet over rechtsvordering tot collectief herstel, 17/02/2014, http://www.dekamer.be/FLWB/pdf/53/3300/53K3300005.pdf.
 Loi n° 2014-344 du 17 mars 2014 relative à la consommation, Journal Officiel, No 0065, page 5400,

⁸⁴ Loi n° 2014-344 du 17 mars 2014 relative à la consommation, Journal Officiel, No 0065, page 5400, 18/03/2014,

http://www.legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT000028738036&categorieLien=id.
85 Article 2, Law no. 244, 24/12/2007, i.e., "Legge Finanziaria", http://www.normattiva.it/uri-res/N2Ls?urn:nir:stato:legge:2007-12-24;244!vig.

res/N2Ls?urn:nir:stato:legge:2007-12-24;244!vig.

86 International Comparative Legal Guide (2014), 'Portugal - Class and Group Actions 2014', http://www.iclg.co.uk/practice-areas/class-and-group-actions/class-&-group-actions-2014/portugal.

http://www.iclg.co.uk/practice-areas/class-and-group-actions/class-&-group-actions-2014/portugal. Wet Collectieve Afwikkeling Massaschade, WCAM, 29.414, http://www.rijksoverheid.nl/onderwerpen/bescherming-van-consumenten/documenten-en-publicaties/richtlijnen/2008/06/24/de-nederlandse-wet-collectieve-afwikkeling-massaschade.html.

⁸⁸ Consumer Rights Bill, http://services.parliament.uk/bills/2014-15/consumerrights.html.

⁸⁹ Commission Recommendation of 11 June 2013 on common principles for injunctive and compensatory collective redress mechanisms in the Member States concerning violations of rights granted under Union Law (2013/396/EU), http://eur-lex.europa.eu/legal-

content/EN/ALL/;ELX_SESSIONID=Qk0pJ7BXLLLzv3bDGqMYnyZKJrlQtxvVSsTc1kL289vZdcLcgX7H!2063911593?uri=CELEX:32013H0396.

⁹⁰ The Belgian House of Representatives' new class action law will apply to personal injury claims only.

⁹¹The UK Consumer Rights Bill or the Consumer Act in France.

To date, only Norway has established a legislative compensation mechanism to deal with offshore accidents. Its Petroleum Activities Act codifies rules for managing aggregated claims and compensation to fishermen. The legislation also provides for transboundary claims from Denmark, Finland and Sweden, as established by the Nordic Environmental Protection Convention.

OPOL also outlines procedures aimed at expediting claims, albeit without the resort to lengthy and potentially costly court proceedings. Although it is a non-legislative claims regime, the UK requires OPOL membership for offshore operations within its jurisdiction. Membership of the scheme also satisfies Ireland's licensing terms for offshore operations. A key shortcoming of the scheme, however, is its designation of the liable operator as the decision maker as to whether claims under the agreement are applicable.

In the absence of a purpose-built compensation scheme, claims for damage from an offshore oil and gas accident would proceed under tort law and cases can be expected to last for between six months and several years. Whilst many EU Member States have recently adopted, or are debating, new legislation to simplify the recourse of claimants under the civil rules of procedure, the civil rules of procedure in Focal States could be streamlined further to better handle large-scale offshore accidents.

Although there are few compensation schemes specifically for offshore accidents, the legal framework for transboundary compensation within the EEA may largely be in place. The 'Brussels I' and 'Rome II' regulations generally give victims of offshore accidents originated in the EU the right to try cases in, and select the laws of, either the country in which the damage was originated or the country in which the damage was sustained (see Section 2.10).

ANNEX I. LEGAL DISPUTE OVER HYPOTHETICAL OIL SPILL CLAIMS UNDER YHE US OIL POLLUTION ACT

Section 2702(b) of the 1990 US Oil Pollution Act establishes liability for the following categories of damages:

- 1. "Damages equal to the loss of profits or impairment of earning capacity due to the injury, destruction, or loss of real property, personal property, or natural resources;
- 2. damages equal to net losses of taxes, royalties, rents, fees or net profit shares by a political subdivision, a State or the federal Government due to the injury, destruction or loss of real or personal property or natural resources;
- 3. the net costs of a State or a political division of a State in providing increased or additional public services as the result of an oil pollution incident;
- 4. the cost of restoring, rehabilitating, replacing or acquiring the equivalent of the damaged natural resources:
- 5. compensation for the loss of the natural resources between the time of their injury and their restoration:
- 6. the reasonable cost of assessing those damages; and
- 7. damages for loss of the subsistence use of a natural resource."92

Two eminent and distinguished law professors have hotly debated the scope of pure economic loss provided in the first category, concerning lost profits. They referred to the following seventeen hypothetical claims in their exchange:

- 1. A commercial fisherman, who relies for his business on fisheries in the Gulf of Mexico, claims lost profits because he is unable to fish for a period of time due to an oil spill polluting the waters in which he fishes.
- 2. A ship's chandler (that is, a man whose business consists of supplying bait, tackle and other necessary supplies to, and maintaining and repairing vessels of, commercial fishermen claims lost profits because the oil spill prevented fishing by commercial fishermen.
- 3. The owner of a beachfront hotel in the Gulf area claims loss of business because tourists have decided to take their holidays at other locations. The oil has not reached the beachfront owned by the hotel and reserved for its guests but has been found in the immediate vicinity, including waters frequently used by the hotel's guests and beaches routinely visited by them.
- 4. An employee of the beachfront hotel has had his hours reduced by 25 per cent, with a consequent loss of 25 per cent of his wages for a certain period because the managers of the hotel have reduced staff hours by 25 per cent.
- 5. The owner of a barge that hauls equipment and supplies up and down a small river that flows to the Gulf cannot operate the barge for a three-week period and thus loses profits, because oil from the spill has entered the river and threatened migratory birds, leading the authorities to close the river to boat traffic for that period to allow the oil to be cleaned up.
- 6. The operator of a dockside restaurant in a seaport on the Gulf claims that it has lost profits because many of its regular customers (who are dockworkers, fishermen and other people with jobs connected to maritime commerce) have stopped frequenting the restaurant.

⁹² United States Code s 2702(b). The order of damages has been changed from the OPA to emphasise the first category.

- 7. A real estate agent whose listings mainly consist of beachfront properties in an area of the Gulf contaminated by the oil spill claims a loss of commissions because the spill has led the market for property sales and rentals to collapse.
- 8. A woodworker who owns a small furniture store in a town that relies on beach tourism for a major source of revenue claims loss of profits due to a decline in orders for furniture because some of the beaches are polluted by the oil spill. The shop is located three miles inland.
- 9. The owner of a beachfront inn located on the Gulf claims loss of profits due to cancelled reservations. No oil from the spill has reached within 100 miles of the waters or stretch of coastline on which the inn is located and there are no discernible adverse physical effects such as noxious odours. Government officials and scientists, however, have concluded that oil from the spill may reach the waters and beaches within a month.
- 10. The owner and operator of a fireworks store claims loss of profits due to reduced tourist traffic. The store is located 150 miles from Gulf beaches on a main interstate highway leading to them. He claims that he relies on tourists travelling to and from the beaches for much of his business.
- 11. The operator of a tour boat that carries passengers along a scenic Gulf shoreline claims lost profits. No oil from the spill has threatened to, or has, come within 400 miles of the area in which the tours take place. The owner claims, however, that popular misimpressions about the scope of the spill have depressed tourism in the entire Gulf area, causing him to lose business.
- 12. The owner of an amusement park in a land-locked area of central Florida claims loss of profits. Many visits to the amusement park combine a trip to it with a beach holiday on Florida's Atlantic Coast. The Atlantic Coast is not threatened by the spill but the owner of the amusement park claims that consumer unease about travelling to Florida have led to the lost profits.
- 13. The owner and operator of a resort in Nevada claims lost profits due to cancellation of a convention by an association of Gulf-area fishermen, who have held its annual meeting at the resort for the past 10 years. The resort owner claims that the cancellation is due to the economic effects of the oil spill.
- 14. A company, incorporated and operated in Hartford, Connecticut, that imports snorkelling equipment from China claims loss of profits due to the spill because sales of the equipment have declined.
- 15. The operator of a seafood restaurant in Phoenix, Arizona, claims loss of profits due to general consumer fears about contaminated seafood caused by the oil spill. The seafood served by the restaurant is not from the Gulf.
- 16. The owner and independent franchisee of a petrol station in Boise, Idaho, which sells petrol produced by the oil company that caused the spill, claims lost income due to a boycott of the petrol station. The boycott was called by a local environmental group that demanded greater corporate accountability.
- 17. The operator of a catering company based in New York City, where the oil company that caused the oil spill is located, claims lost revenues. Prior to the spill, a substantial portion of the profits of the company were generated by catering at the oil company's headquarters. The catering was substantially reduced after the spill.

Professor Goldberg, who prepared a report for the GCCF, concluded that the first category of damages authorises "recovery for any person who suffers economic loss because an oil spill has interfered with his or her ability to use property or resources that he or she has a particular right to put to commercial

use". ⁹³ Professor Robertson considers that this interpretation is too narrow and bars a large number of claims that should be covered. ⁹⁴ According to Professor Robertson, Professor Goldberg's interpretation of the provision would exclude claims 9 to 17 below and could also exclude claims 6 through 8, thus potentially including only claims 1, 3 and 4. In contrast, Professor Robertson considered that his interpretation would include claims 1 through 5 and probably claims 6 through 10.

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⁹³ John C.P. Goldberg, OPA and Economic Loss: A Reply to Professor Robertson, Mississippi College Law Review 203, 204 (2011) (citing John C.P. Goldberg, Liability for Economic Loss in Connection with the Deepwater Horizon Spill, vol. 30, 7 (22 November 2010), available from http://nrs.harvard.edu/urn-3:HUL.InstRepos:4595438 reprinted in Mississippi College Law Review, vol. 30, 355 app. (2011)).
⁹⁴ David W. Robertson, Criteria for Recovery of Economic Loss Under the Oil Pollution Act of 1990, Texas Journal of Oil, Gas, and Energy Law, vol. 7, 241, 242 (2011); see also David W. Robertson, OPA and Economic Loss: A Response to Professor Goldberg, Mississippi College Law Review, vol. 30, 217 (2011).

ANNEX II. CRIMINAL LIABILITY FOR OFFSHORE SAFETY BREACHES IN SELECTED FOCAL STATES⁹⁵

i. Denmark

Part 10 of the Act on the Use of the Danish Subsoil contains some general provisions on criminal liability.

38.-(1) Any party

- (i) carrying on the activities referred to in sections 1(2) and 17 without a licence issued by the Minister for Climate and Energy,
- (ii) transgressing the provisions of section 26(1) or failing to submit the samples and other information required according to section 34,
- (iii) disregarding enforcement notices issued in accordance with this Act or regulations laid down in pursuance of this Act, shall be punishable by a fine or imprisonment for a term of up to four months.
- (2) Any regulations issued in pursuance of this Act may include penalty provisions imposing a fine or imprisonment for a term of up to four months for any transgression of the provisions laid down in such regulations.
- (3) Companies, etc. (legal persons) may be held criminally liable in accordance with the provisions laid down in Part 5 of the Danish Criminal Code.

Part IX of the Petroleum Safety Act (titled "Penalties") specifies who can be held criminally liable for what type of acts, and what the sanctions are:

- 70. (1)The licensee, owner of offshore installations under section 2(1)(i)(c), operating company, contractor, employer, company manager and offshore installation manager who do not take care to
- i) identify and assess the risks pursuant to section 5(1), (3) and (4), section 8(4), section 10(1), section 11(2), section 33(1) and (3), section 34(1), sections 35-36 or section 53.
- ii) supervise pursuant to section 6(1), section 7 second sentence, section 8(2) second sentence, section 10(2), section 19(3) or section 20(3), or
- iii) give instructions or training pursuant to section 7 first sentence, section 8(2) first sentence, section 9, first sentence, or section 10(3), second sentence, shall be fined or punished with imprisonment for up to one year.
- (2) The supervisor or employees who do not assist in identifying and assessing the health and safety risks pursuant to section 12 or 13 shall be fined or punished with imprisonment for up to one year.
- (3) Anyone who

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i) infringes section 5(2) and (5), section 8(1), (3) and (5), section 10(3) first sentence, and (5), section 11(1), (3) and (4), section 12(1) second sentence, and (2) and (3), section 13(1) and (2), section 16, section 18(1)-(5), section 19(1) and (2), section 20(1) and (2), sections 23-25, sections 27-31, section 33(2), section 45(4), section 46(1) and (3), section 47 or section 50(1),

⁹⁵ Source: De Smedt, et al. (2013), Civil Liability and Financial Security for Offshore Oil and Gas Activities, Maastricht European Institute for Transnational Legal Research - METRO, Maastricht University.

- ii) has work carried out contrary to section 50(3), or section 51(1)-(3), is in charge of or supervises such work or
- *iii)* does not comply with orders pursuant to section 45(3), or section 64. shall be fined or punished with imprisonment for up to one year.
- (4) The maximum imprisonment is two years if the infringement has been made intentionally or by gross negligence.
- (5) In connection with meting out the penalty pursuant to subsection (3)(i), it shall, to the extent that the employer and the operating company have fulfilled their obligations pursuant to chapter 2 and 4, be regarded as aggravating circumstances for employees, if these intentionally or by gross negligence infringe legislation requirements on
- i) the use of personal protective equipment,
- ii) the use of extraction facilities,
- iii) the use of protection equipment or safety precautions,
- iv) the use of justifiable working methods or
- v) crane and forklift certificates.
- (6) In connection with meting out the penalty pursuant to subsections (1)-(4)—outside the cases mentioned in subsection (5)—the following shall be regarded as aggravating circumstances:
- i) that the infringement has resulted in injury to life and health or caused danger of this,
- ii) that an order pursuant to section 64 has been previously made for the same thing or similar conditions, or
- iii) that in connection with the infringement a financial advantage has been obtained or intended to be obtained for the person himself or others. (7) It shall be regarded as a special aggravating circumstances if, for persons under the age of 18, there has been injury to life and health or if danger of this has been evoked, cf. subsection (6)(i).
- (8) If no profits are seized, which have been obtained by infringement, the meting out of the fine, including additional fine, shall take into special consideration the size of a financial advantage obtained or intended to be obtained.
- (9) The limitation period for criminal liability is five years for infringement of section 18(1)-(5) and rules issued pursuant to section 18(6).
- (10) Unless a higher penalty is applicable pursuant to other legislation, any person shall be fined who violates the provisions in Regulation (EC) No 336/2006 of the European Parliament and of the Council of 15 February 2006 on the Implementation of the International Safety Management Code within the Community and repealing Council Regulation (EC) No 3051/95.
- 71. (1) The individual employer shall be punishable by a fine, even though the infringement cannot be considered intentional or grossly negligent, cf. however subsection (3), if the employer
- i) does not take care to identify and assess risks pursuant to section 10(1) or section 35,
- *ii) does not take care to supervise pursuant to section 10(2),*

- iii) has work carried out contrary to section 50(3) or section 51(1), or
- iv) does not comply with orders made pursuant to section 45(3) or section 64.
- (2) A condition for the individual employer being punishable by a fine pursuant to subsection (1) above is that one or more persons attached to the company or the company as such can be blamed for the infringement. No imprisonment shall be determined in lieu of a fine.
- (3) To the extent that the employer has fulfilled his obligations pursuant to sections 10 and 35, the employer cannot be punishable by a fine if employees infringe legislation requirements on
- i) the use of personal protective equipment,
- ii) the use of extraction facilities,
- iii) the use of protection equipment or safety precautions,
- iv) the use of justifiable working methods or
- v) crane and forklift certificates.
- 72. In rules laid down pursuant to this Act, a penalty can be fixed in the form of a fine for
- (1) infringement of the rules and for lack of non-compliance of orders or prohibitions pursuant to the rules. Infringement of rules that put regulations into force, which are not written in Danish, cf. section 44, shall not be punishable. Furthermore, it can be determined that the individual employer, who infringes provisions, orders or prohibitions as stated, shall be punishable by a fine, even though he cannot be blamed for the infringement as intentional or grossly negligent. Punishment by fine is conditional on the infringement being blamed one or more persons attached to the company or the company as such. No imprisonment shall be determined in lieu of a fine
- (2) Punishment by fine pursuant to subsection (1), second sentence, and section 71, cannot be imposed on company managers, cf. section 10(6).
- 73. Criminal liability may be imposed on limited liability companies, etc. (legal persons) pursuant to the rules set out in Part V of the Danish Criminal Code. Section 71(3) is similarly applicable.

ii. Norway

The Norwegian Petroleum Activities Act provides in Section 10-17 that:

Wilful or negligent violation of provisions or decisions issued in or pursuant to this Act shall be punishable by fines or imprisonment for up to 3 months. In particularly aggravating circumstances, imprisonment for up to 2 years may be imposed. Complicity is punishable in the same way. These provisions shall not apply if the violation is subject to a more severe penalty under any other statutory provision.

iii. UK

There are several laws and regulations that have provisions related to the criminal liability for offshore activities in UK jurisdiction.

First, in Part II of the Petroleum Act 1998 (which is titled "Offshore activities") section 10 provides that criminal law is applicable to waters including the territorial sea and the continental shelf. 96 This Act also mentions that when "a body corporate is guilty of an offence by virtue of an Order in Council", the "director, manager, secretary or other similar officer of the body corporate or any person who was purporting to act in any such capacity, he as well as the body corporate shall be guilty of that offence and shall be liable to be proceeded against and punished accordingly."⁹⁷

In addition, the Environmental Protection Act 1990 also has provisions on penalties for offences of polluting controlled waters which concerns criminal liability for actions during the offshore activities. Section 145 of the Environmental Protection Act 1990 refers to the Water Act 1989 (penalties for offences of polluting controlled waters or contravening consent conditions) and Control of Pollution Act 1974 (corresponding penalties for Scotland). The penalties are as follows:

- on summary conviction, to imprisonment for a term not exceeding three months or to a fine not exceeding £20,000 or to both;
- on conviction on indictment, to imprisonment for a term not exceeding two years or to a fine or to both.

Furthermore, the Offshore Chemicals Regulations 2002 has in Regulation 18 provisions on criminal offences. The penalties largely reflect the provisions in Environmental Protection Act 1990, and the corporate liability is in line with that under Environmental Protection Act 1990. In addition, the Offshore Chemicals Regulations 2002 also defines what constitutes an offence. The relevant provisions in Regulation 18 are as follows:

- (1) Subject to paragraph (2), a person is guilty of an offence if he—
- (a) contravenes regulation 3(1);
- (b) fails to comply with the terms of a direction given under regulation 16(4);
- (c)fails to supply any information required to be supplied by virtue of regulation 3(3) or 15:
- (d)fails to supply any information required to be supplied by virtue of the terms of any permit granted under these Regulations;
- (e)knowingly or recklessly makes a statement which he knows to be false or misleading in a material particular where such a statement—
- (i)is made in connection with or for the purposes of any permit application or any application under regulations 10 or 11; or
- (ii)is made for the purposes of satisfying any requirement under these Regulations for the supply of information to the Secretary of State or an inspector appointed pursuant to regulation 16;
- (f)wilfully obstructs an inspector appointed under regulation 16; or
- (g)without reasonable excuse fails to comply with a requirement imposed in pursuance of regulation 16 or prevents another person from complying with such a requirement.
- (2) Where a person is charged with an offence under paragraph (1)(a) or (1)(b), it is a defence to prove that the contravention—

⁹⁶ Section 10 (7) of Petroleum Act 1998.

⁹⁷ Section 10 (4) of Petroleum Act 1998.

- (a) arose as a result of something which could not have been reasonably prevented by him; or
- (b)was due to something done as a matter of urgency for the purposes of securing the safety of any person.
- (3) A person guilty of an offence under this regulation shall on summary conviction be liable to a fine not exceeding the statutory maximum and on conviction on indictment to a fine.

The Offshore Petroleum Activities (Oil Pollution Prevention and Control) Regulations 2005 contain some provisions in Regulation 16 on Offences as well, which specifies the concept of an offence and prescribes penalties:

- (1) Subject to paragraphs (2) and (4), a person is guilty of an offence if he—(a)contravenes regulation 3(1);
- (b)fails to comply with the terms of an enforcement notice or a prohibition notice;
- (c)fails to supply any information required to be supplied by virtue of the terms or conditions of any permit granted under these Regulations;
- (d) fails to supply any information required to be supplied by virtue of regulation 3(4);
- (e)wilfully obstructs an inspector appointed under regulation 12;
- (f)without reasonable excuse, fails to comply with a requirement imposed in pursuance of regulation 12(3), or prevents another person from complying with such a requirement;
- (g)knowingly or recklessly makes a statement which he knows to be false or misleading in a material particular where such a statement—
- (i)is made in connection with, or for the purposes of, any application for a permit, the renewal of a permit, the variation of a permit or the assignment of a permit; or
- (ii) is made for the purposes of satisfying any requirement under these Regulations for the supply of information to the Secretary of State or an inspector appointed by her pursuant to regulation 12.
- (2) Where a person is charged with an offence under paragraph (1)(a), (1)(b),(1)(c) or 1(d), it is a defence to prove that the contravention or failure—
- (a) arose as a result of something which could not reasonably have been prevented by him; or
- (b)subject to paragraph (3), was due to something done as a matter of urgency for the purpose of securing the safety of any person.
- (3) A person does not have the defence provided by paragraph (2)(b) if the court is satisfied—
- (a)that the thing done—
- (i)was not necessary for the purpose mentioned in that paragraph; and
- (ii)was not a reasonable step to take in the circumstances; or
- (b)that it was necessary for the purpose mentioned in that paragraph but the necessity was due to the fault of the defendant.
- (4) The discharge of oil into relevant waters in contravention of any one or more of the terms of or conditions attached to a permit shall not constitute an offence for the purpose of this regulation where the term or condition in question relates exclusively to one or more of the trading schemes.

(5) A person guilty of an offence under this regulation shall, on summary conviction, be liable to a fine not exceeding the statutory maximum and, on conviction on indictment, to a fine.

Moreover, the Environmental Damage (Prevention and Remediation) Regulations 2009 also has relevant provision in Regulation 34:

- (1) A person guilty of an offence under these Regulations is liable—
 (a) on summary conviction, to a fine not exceeding the statutory maximum or to imprisonment for a term not exceeding three months or both; or
 (b) on conviction on indictment, to a fine or to imprisonment for a term not exceeding two years or both.
- (2) Where a body corporate is guilty of an offence under these Regulations, and that offence is proved to have been committed with the consent or connivance of, or to have been attributable to any neglect on the part of—
 (a) any director, manager, secretary or other similar person of the body corporate, or (b) any person who was purporting to act in any such capacity, that person is guilty of the offence as well as the body corporate.
- (3) For the purposes of paragraph (2), "director", in relation to a body corporate whose affairs are managed by its members, means a member of the body corporate.

ANNEX III. SUMMARIES OF EEA MEMBER COUNTRY LIABILITY REGIMES APPLICABLE TO OFFSHORE ACCIDENTS⁹⁸

i. Bulgaria

Liability for claims for compensation for bodily injury and property damage is imposed by the Law on Obligations and Contracts.

Article 3(1) of the Maritime Space Act provides, in pertinent part, that "[d]amages, caused by an act of quasi delicti occurring in the ... territorial sea, on the continental shelf and in the exclusive economic zone, shall be subject to Bulgarian legislation". The term "delicti" is derived from the Latin word "delictum" meaning "fault". The application of tort law to offshore oil and gas operations may mean that only tort law based on fault applies. Or it may have a broader meaning to include tort law based on strict liability. This issue is, of course, only relevant if a provision of the Law on Obligations and Contracts that imposes strict liability applies to a claim for compensation from pollution from an offshore oil and gas incident.

Even if only liability based on negligence applies, the burden is on the tortfeasor not the claimant. That is, the burden concerning proof of fault under the Law on Obligations and Contracts is reversed; the claimant is not required to prove fault; the tortfeasor has the burden of showing that it did not act with fault.

It is unclear whether the Law on Obligations and Contracts imposes liability for pure economic loss. Article 45 provides, in pertinent part, that "[e]very person is obligated to redress the damage he has faultily caused to another person". Article 51 provides, in pertinent part, that "[c]ompensation shall be due for all damages that are a direct and immediate consequence of the tort".

If the Law on Obligations and Contracts imposes liability for pure economic loss, liability thus applies only to damage that is "a direct and immediate consequence of the tort". It may, therefore, be difficult for a claimant for compensation for harm caused by pollution from an offshore oil and gas incident to prove that the loss is a direct and immediate consequence of the incident.

Article 170 of the Environmental Protection Act provides that "any person, who causes damage at fault to a person because of polluting or damaging the environment shall compensate them". It is unclear, however, whether the Environmental Protection Act imposes liability for pure economic loss, albeit fault-based if it does. Further, it appears that the Act does not apply to actions carried out on the continental shelf and exclusive economic zone. In respect of State property, article 170 refers to the Minister of Environment and Water as the governmental authority with power to bring an action when harm extends over the territory of multiple administrative regimes. Article 170 further refers to the competent Regional Governor as the governmental authority with power to bring an action if the harm extends over multiple municipalities.

Article 202 of the Water Act provides that a person who causes water pollution is liable for compensation for harm to other persons if the polluter is at fault. Article 3 of the Water Act, however, refers to surface water, groundwater, internal marine waters and the territorial sea; it does not refer to the continental shelf and the exclusive economic zone.

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⁹⁸ Source: BIO by Deloitte (2014), *Civil liability, financial security and compensation claims for offshore oil and gas activities in the European Economic Area, Final Report prepared for European Commission – DG Energy.* Significantly more detailed descriptions of the applicable laws in each country can be found in the Annex of that report.

In summary, Bulgarian law may impose liability for pure economic loss but, if it does so, a claimant would have to show that its loss is a direct and immediate consequence of the incident. Further, if fault-based tort law applies, the tortfeasor bears the burden of showing that it did not act with fault.

The Production Sharing Agreement for the first international offshore licensing round, launched on 2 April 2014, provides an indemnity and a hold harmless agreement from the Contractor to Croatia for "any damage or loss which the Contractor, its employees or Sub-contractors and their employees may cause to the person, the property or the rights of other persons" from hydrocarbon operations. Further, the agreement requires a Contractor, among other things, to "take all necessary and adequate steps to ... ensure payment of adequate compensation for injury to persons or damage to property caused consequent to Petroleum Operations", to control and clean up any pollution and, if necessary, to reimburse the State for such costs.

The agreement does not impose liability for damage or loss on the Contractor itself; it is limited to liability as between the parties to the agreement, that is, the Contractor and the State.

The law that imposes liability for compensation for bodily injury and property damage, as well as pure economic loss, is the Civil Obligations Act which imposes fault-based liability. If offshore oil and gas operations were to be considered to fall within the categories in the Act for a "dangerous thing" or a "dangerous activity", strict liability would apply. It is unclear, however, whether they would fall within this category.

In respect of lost profits, a claimant would have to show "that in the due course of events, or according to special circumstances, there was a probability of making the profit and that he/she had the intention to acquire that profit". 99 Further, the claimant would have to show that the pollution caused by an offshore oil and gas incident is, in general, likely to cause the damage that occurred. 100

There has been no major pollution case in Croatia so far concerning offshore oil and gas activities. Nonetheless, a RO-RO (Roll on/Roll off) vessel burned once between Italy and Croatia. 101 There are no Protocols or special provisions under Croatian law for transboundary liability. 102

There is however, a Decree on the main technical requirements on safety and security of offshore exploration and production of hydrocarbons in the Republic of Croatia. According to this Decree, a platform is considered as a vessel (technical maritime vessel). 103 Therefore, the Civil Liability Convention or Bunker Oil Convention could apply to it. In addition, some limitations within the Civil Liability Convention are linked to the tonnage for vessels, which is a difficult limitation to set in place for such activities. 104 A legal expert stated that there was no knowledge as to whether or not this Decree had been applied, but that it could be assumed that the Decree was applicable to several

⁹⁹ See Marko Baretić and Dr. Saša Nikšić, Croatia, 88, 97 in Vernon Valentine Palmer and Mauro Bussani, Pure Economic Loss: New Horizons in Comparative Law (Routledge-Cavendish, 2009).

¹⁰⁰ See Vernon Valentine Palmer and Mauro Bussani, Pure Economic Loss: The Ways to Recovery, Netherlands Comparative Law Association, Electronic Journal of Comparative Law, vol. 11(3), 46 (December 2007). ¹⁰¹ See Maritime Information Centre, Vessel on fire at sea (4 February 2008); available at

http://www.micportal.net/index.php?option=com_content&view=article&id=126%3Avessel-on-fire-atsea&Itemid=66

102 Telephone interview with Miran Maćešić, Maćešić & Partners LLC, 10 April 2014.

¹⁰³ Article 3 of the Decree, available in Croatian at: http://www.azu.hr/wp-content/uploads/2014/03/Pravilnik.pdf ¹⁰⁴ See IMO raises compensation limits for oil pollution disasters (Legal Committee - 82nd session 16-20 October 2000); available at http://www.imo.org/blast/mainframe.asp?topic_id=68&doc_id=514

production platforms that produce gas in the north Adriatic (which are operated by the joint venture company of INA d.d., Agip SpA and alternatively Edison SpA).¹⁰⁵

In summary, liability exists under Croatian law for lost profits if a claimant shows the probability of making the profits and that he/she had the intention to acquire the profits. Further, the claimant would have to show that the pollution caused by an offshore oil and gas incident is, in general, likely to cause the loss of profits, or other damage that occurred. The claimant would probably also have to show that the person who caused the lost profits was at fault. Further, the Civil Liability Convention or the Bunker Oil Convention may apply to some incidents, depending on the nature of the offshore facility.

iii. Cyprus

Claims for bodily injury and property damage may be brought under the common law, as set out in the Law of Civil Wrongs, as amended (Cap. 148). The Civil Wrongs Law establishes civil liability for negligence. It also imposes strict liability for some activities, none of which appears to be relevant to a claim for bodily injury and property damage from an offshore oil and gas incident.

Cypriot law does not impose liability for pure economic loss.

In addition to statutory liability, the Production Sharing Contract, which is entered into by licensees for a production licence, provides for contractual liability as follows:

"The Contractor shall indemnify and compensate any person, including the Republic [of Cyprus], for any damage or loss which the Contractor, its employees or subcontractors and their employees may cause to the person, the property or the rights of other persons, caused by or resulting from Hydrocarbons Operations, including any environmental damage".

It is unclear from the above provision whether the Production Sharing Contract imposes contractual liability for pure economic loss as well as bodily injury and property damage. The provision imposes strict liability; no defences or exceptions are set out.

The Production Sharing Contract also requires the Contractor to indemnify and hold harmless the State. Unlike the indemnity provision set out above, this provision is limited to liability between the parties to the agreement, that is, the Contractor and the State.

In summary, liability exists under Cypriot law for fault-based liability for bodily injury and property damage, but not for pure economic loss. Strict liability exists under the Production Sharing Contract for compensation to "any person" including the State, but it is unclear whether liability under the contract covers pure economic loss.

iv. Denmark

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Section 35 of the Subsoil Act is the main provision that imposes liability for bodily injury and property damage (and economic loss) caused by the exploration for, and production of, hydrocarbons. Section 35(1) provides that "A licensee shall be liable to pay damages for any loss, damage or injury caused by the activities carried on under the licence, even though such loss, damage or injury was caused accidentally". Persons who may claim compensation include the licensee's employees and contracting parties, as well as third parties.

¹⁰⁵ Telephone interview with Miran Maćešić, Maćešić & Partners LLC, 10 April 2014.

The Environmental Damage Compensation Act imposes strict liability for compensation for bodily injury, property damage and economic loss from pollution from activities and facilities listed in an Annex to the Act. The activities and facilities in the Annex include, among other things, energy facilities and other facilities considered to have a high risk of causing pollution. Liability is subject to an exception for force majeure. The operator of an offshore oil and gas facility could be liable for compensation under the Act provided, of course, that the facility is concluded to be included in the Annex.

Under Danish civil law, pure economic loss is defined by the same rules as loss that results from physical damage to property or bodily injury. That is, liability for pure economic loss is not treated differently than liability for bodily injury or property damage. The main general source of law for pure economic loss is case law. Three elements constitute such a loss: first the claimant must prove he suffered a loss, second the claimant must prove that the loss is caused by an act or omission of the defendant and third, there must be a causal link between the two. Such a link can be negligence by the tortfeasor or strict liability. 106 In this respect, pure economic loss must not be too remotely connected to the tortfeasor's negligent conduct. Further, the claimant must have been directly affected by the tortfeasor's negligence. 107

Major obstacles to claims for pure economic loss could thus be encountered if a defendant asserts that the claim is too remote to be entitled to damages under Danish law. In practice, pure economic loss is more difficult to prove than bodily injury or property damage. 108 The recovery of pure economic loss in the form of lost income due to pollution from an offshore oil and gas incident would appear to be unlikely. 109

In summary, the Subsoil Act imposes strict liability for bodily injury, property damage and economic loss caused by an offshore oil and gas incident. The Liability for Damages Act imposes fault-based liability for personal injury and loss of dependency from an offshore oil and gas incident. The Environmental Damage Compensation Act, if it applies, imposes strict liability for claims for bodily injury, property damage and economic loss. In order to recover pure economic loss, a claimant must show that its loss is direct and that the defendant's act was likely to cause the loss.

Liability for bodily injury, property damage and pure economic loss in France is governed by the Civil Code which, as a general rule, imposes fault-based liability. Although the Civil Code has some provisions that provide an exception from this general rule by imposing strict liability, none of them appear to apply to a claim from an offshore oil and gas incident.

¹⁰⁶ See Vernon Valentine Palmer and Mauro Bussani, Pure Economic Loss, New Horizons in Comparative Law 283 (University of Texas at Austin, Studies in Foreign and Transnational Law) (Basil Markesinis and Jörg Fedtke, general editors, Routledge-Cavendish, 2009).

¹⁰⁷ See Vernon Valentine Palmer and Mauro Bussani, Pure Economic Loss: New Horizons in Comparative Law, University of Texas at Austin, Studies in Foreign and Transnational Law (Basil Markesinis and Jörg Fedtke, general editors, Routledge-Cavendish, 2009).

108 Bernhard Gomard, Recent Developments in the Danish Law of Tort, Stockholm Institute for Scandinavian

Law 1957-2009.

¹⁰⁹ See Vernon Valentine Palmer and Mauro Bussani, Pure Economic Loss: New Horizons in Comparative Law 65-66 (University of Texas at Austin, Studies in Foreign and Transnational Law) (Basil Markesinis and Jörg Fedtke, general editors, Routledge-Cavendish, 2009) (considering that Danish courts would deny hypothetical claims for lost income suffered by cattle raisers and butchers from the closure of cattle and meat markets for 10 days due to a person having negligently allowed infected cattle to escape).

Article 1382 of the French Civil Code states that "[a]ny act whatever of man, which causes damage to another, obliges the one by whose fault it occurred, to compensate it". Article 1383 states that "[e]veryone is liable for the damage he causes not only by his intentional act, but also by his negligent conduct or by his imprudence". Neither of these articles would "screen out recovery for pure economic loss". French law may, thus, potentially allow claims by, among others, "marinas, boat suppliers, hotel operators, and commercial fisherman in the area [who] suffer severe economic loss" due to an offshore oil and gas incident. For example, in one case, the owner of a café who lost income because he lost some of his customers due to the pollution of a nearby river was awarded compensation. In another case, however, a claim by the State for loss of taxes due to unsold fishing licences did not succeed due to the uncertainty of the loss.

Article L.155-3 of the Mining Code also imposes liability on the explorer or operator or, if not, the holder of the mining licence, for damage caused by its activities. Such liability is not limited to the area for which the mining licence is granted or the time during which the licence is in effect. In case of a default by the holder, the State guarantees compensation for the damage (which is then subrogated to the rights of the victim against the responsible person).

Compensation for pollution in France is not limited to persons who suffer lost income. In respect of pollution from the *Erika* oil spill, the *Paris Tribunal de grande instance* awarded compensation for environmental damage to "the local authorities to whom the law grants a specific competence in matter of environment, conferring upon them a special responsibility in the protection, management, and preservation of a territory". The court also awarded compensation to the *Ligue de protection des oiseaux*, an environmental NGO that had taken care of birds affected by the oil spill. One commentator remarked that compensation for such harm had been recognised before "but never with such high scale compensation". The court also awarded compensation before "but never with such high scale compensation".

Although there is no established compensation scheme in France, in case of a "national disaster", *ad hoc* compensation procedures may be created. AZF is an example of such a procedure.and Buncefield

The explosion in a warehouse that stored granular ammonium nitrate at the AZF chemical plant in Toulouse, France, on 21 September 2001, caused the deaths of 30 people (including 21 employees), injuries to over 4,500 people, and the destruction of 27,000 homes and other buildings. On 3 October 2001, the French Government established the National Disaster Victim Compensation Committee (*Comité National de Suivi pour la prise en charge des Victimes*), led by the French Ministry of Justice. The Committee included the Grand Paroisse Group (owner of the chemical plant), governmental

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¹¹⁰ See Vernon Valentine Palmer and Mauro Bussani, Pure Economic Loss: The Ways to Recovery, Netherlands Comparative Law Association, Electronic Journal of Comparative Law, vol. 11(3), 34 (December 2007); available at http://www.ejcl.org/113/article113-9.pdf

¹¹¹ See Vernon Valentine Palmer and Mauro Bussani, Pure Economic Loss: The Ways to Recovery, Netherlands Comparative Law Association, Electronic Journal of Comparative Law, vol. 11(3), 38 (December 2007)(see page 13; analogising chemical spill to a hypothetical concerning a person who negligently allows infected cattle to escape, resulting in the Government ordering the closure of cattle and meat markets).

¹¹² Environmental Liability and Ecological Damage in European Law 487 (Monika Hinteregger, editor,

¹¹² Environmental Liability and Ecological Damage in European Law 487 (Monika Hinteregger, editor, Cambridge University Press, 2008)(citing Corr. Turnhout, 18 February 1992, unpublished, No. 498).

Environmental Liability and Ecological Damage in European Law 487 (Monika Hinteregger, editor, Cambridge University Press, 2008)(citing Pol. Chimay, 14 August 1931, JJP, 1932, 378).

¹¹⁴ See Olivier Moréteau, France: French Tort Law in the Light of European Harmonization, Journal of Civil Law Studies, vol. 6(2), 759, 788-89 (quoting TGI Paris, 16 January 2008, paragraph 3.1.2.2.2.3).

¹¹⁵ See Olivier Moréteau, France: French Tort Law in the Light of European Harmonization, Journal of Civil Law Studies, vol. 6(2), 759, 789.

authorities, elected officials and disaster-victim associations. On 31 October 2001, an agreement, called the National Disaster Compensation Convention, was signed. The agreement established special procedures to provide compensation to victims. The claims were managed by a team of 220 experts (including medical experts), 25 claims managers, and 10 lawyers. Over EUR 2 billion was eventually paid out in compensation for claims for bodily injury and property damage; 16,000 people were compensated for bodily injuries and 71,000 cases (33,000 of which were for residences, including private and local authority houses and flats) involved compensation for property damage. Other settled claims involved public, commercial buildings and vehicles.

Notably, however, there were delays in a substantial part of the compensation payments as a result of their coverage by insurance. 116

vi. Germany

Liability for compensation for bodily injury and property damage is imposed by the German Civil Code. The standard of liability is fault-based. The Civil Code does not specifically impose liability for pure economic loss. One commentator has stated that a person in the fisheries industry would not succeed in a claim unless, according to an exception, its business was an "established and practised commercial operation" and the pollution was directly intended to interfere with it. The same commentator considered that a person in the tourism industry would not be entitled to compensation because the damage would be indirect.¹¹⁷ This requirement, thus, means that many claims for pure economic loss from an offshore oil and gas incident would not succeed.

Strict liability for bodily injury and property damage is imposed by the Environmental Liability Act and the Water Resources Act. One commentator considers that persons in the fisheries industry should be able to claim lost profits under the Water Resources Act but that persons in the tourism industry would probably be unable to claim because their losses would be regarded as indirect damage. 118

vii. Greece

The environmental protection law (Law 1650/86) in Greece imposes liability for bodily injury and property damage from water pollution (and other environmental damage). Article 29 provides that:

"Whoever, whether a physical person or legal entity, causes pollution or other degradation to the environment, is liable for damage, unless he proves that the damage is due to an act of God or was the result of a third party's culpable act". 119

One commentator considered that a hypothetical claim by the owner of an outdoor recreation business that had organised rafting and canoeing tours on a river for 10 years for a total loss of profits for three years during which time the river could not be used for white water canoeing and rafting due to

¹¹⁶ See BIO Intelligence Service, Study to explore the feasibility of creating a fund to cover environmental liability and losses occurring from industrial accidents (2013), pp. 24-26 (Final Report prepared for European Commission DG Environment).

¹¹⁷ See Environmental Liability and Ecological Damage in European Law 525 (Cambridge University Press, Monika Hinteregger, editor, 2008).

¹¹⁸ See Environmental Liability and Ecological Damage in European Law 525 (Cambridge University Press, Monika Hinteregger, editor, 2008).

¹¹⁹ Translation by Monika Hinteregger. Environmental Liability and Ecological Damage in European Law 284 (Monika Hinteregger, editor, Cambridge University Press, 2008).

pollution of a nearby river would succeed under Law 1650/86. ¹²⁰ By analogy, it appears that at least some claims for lost profits from pollution from an offshore oil and gas incident should also succeed.

Liability for claims for bodily injury and property damage is also imposed by the Civil Code. The Civil Code may also impose liability for pure economic loss but, if so, stringent causation requirements would limit the number of successful claims. The claimant must show that the defendant was, in general, likely to cause the harm that occurred and also that the defendant's act affected an interest considered to be protected by the purpose of the law. ¹²¹ It is, thus, unclear whether a claim for harm for pure economic loss from an offshore oil and gas incident would succeed; much would depend on the nature and circumstances of each claim. In this respect, the commentator who considered that a hypothetical claim under article 29 of Law 1650/86 for lost profits by an outdoor recreational company, as described directly above, would succeed, also concluded that the claim for lost profits would succeed under the Civil Code. ¹²²

The strict liability provisions of the Civil Code do not appear to be relevant to a claim from pollution from an offshore oil and gas incident.

The Draft Model Lease Agreement for the 2012 open round requires a lessee who causes harm to ensure adequate compensation for claims for bodily injury and property damage. Article 12.2(b) of the Agreement provides as follows "[t]he Lessee undertakes for the purposes of this Agreement to take all necessary and adequate steps ... to ensure adequate compensation for injury to persons or damage to property caused by the effect of the Petroleum Operations".

The obligation appears to be subject to strict liability, with no defences or exceptions. The agreement does not, however, specifically state that the lessee must pay compensation; instead, it states that the lessee must take all necessary steps to ensure adequate compensation. Liability under the agreement is, thus, not entirely clear.

In summary, Greek law imposes strict liability for compensation from pollution, subject to the defences of an act of God or a third party's culpable act. Greek law recognises claims for pure economic loss subject to the claim meeting the other requisites of Greek tort law. The Draft Model Lease Agreement may impose liability for bodily injury and property damage but this is not entirely clear.

viii. Iceland

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Article 28 of the Hydrocarbons Act states that "[t]he holders of prospecting licenses or exploration and production licenses will be liable for damages under this Act for any loss or damage caused by hydrocarbon activity, including environmental damage, regardless of whether the loss or damage was caused by culpable conduct or not". The Hydrocarbons Act also states that liability under other Icelandic laws also applies referring, in particular, to the Tort Damages Act.

Cambridge University Press, 2008).

¹²⁰ Environmental Liability and Ecological Damage in European Law 494 (Monika Hinteregger, editor, Cambridge University Press, 2008).

¹²¹ See Vernon Valentine Palmer and Mauro Bussani, Pure Economic Loss: The Ways to Recovery, Netherlands Comparative Law Association, Electronic Journal of Comparative Law, vol. 11(3), 45 (December 2007). ¹²² Environmental Liability and Ecological Damage in European Law 494 (Monika Hinteregger, editor,

Further, Section 18 of the Model Licence for the Second Licensing Round (Model Licence)¹²³ also provides that the provisions imposing liability for loss or damage caused by a hydrocarbon activity under article 28 of the Hydrocarbons Act "does not limit the right to damages by an injured party derived from general rules". The Model Licence includes an indemnity and hold harmless agreement from the lessee to the State.

Still further, article 7 of Act No. 33/2004 on marine and coastal antipollution measures provides that "[e]ach and every one causing pollution in Iceland's pollution jurisdiction [which includes the continental shelf and the exclusive economic zone] is liable under the general rules of damages for damage attributable to the pollution".

The Tort Damages Act imposes fault-based for bodily injury and property damage and, perhaps pure economic loss.

In summary, liability for compensation for traditional damage from an offshore oil and gas incident under Icelandic law is as follows:

- The Hydrocarbons Act imposes strict liability for "any loss or damage caused by hydrocarbon activity, including environmental damage" but it is not clear that the term "loss or damage" includes compensation for pure economic loss; and
- The Tort Claims Act imposes fault-based liability for bodily injury and property damage but it is unclear whether it also imposes liability for pure economic loss.

ix. Ireland

The legislation for the exploration and production of offshore oil and gas in Ireland does not specifically impose liability for compensation to third parties who suffer bodily injury or property damage from offshore oil and gas operations. Instead the Civil Liability Act, 1961 and common law apply, both of which are mainly fault-based for claims for compensation of the type that would be claimed for harm from pollution from an offshore oil and gas incident.

As a general rule, liability for pure economic loss does not exist under Irish law. A court may award pure economic loss but only if the loss was foreseeable and significant. 124

One commentator considered that a hypothetical claim concerning the owner of an outdoor recreation business that had organised rafting and canoeing tours on a river for 10 years for a total loss of profits for three years during which the river could not be used for white water canoeing and rafting due to pollution of a nearby river would face a "heavy burden in establishing liability". The commentator noted that the court could rule favourably if it considered that the polluter should reasonably have foreseen that all the users of the river would be deprived of its use if it was polluted. ¹²⁵ By analogy, claims for lost profits from pollution from an offshore oil and gas incident are also likely to be difficult to establish.

¹²⁴ See Environmental Liability and Ecological Damage in European Law 525 (Monika Hinteregger, editor, Cambridge University Press, 2008).

¹²³ National Energy Authority, Model Licence for Exploration and Production of Hydrocarbons, Second Licensing Round on the Icelandic Continental Shelf (Model Licence). An English translation of the Model Licence is available from http://www.nea.is/2nd-licensing-round/legal-documents/

¹²⁵ Environmental Liability and Ecological Damage in European Law 494 (Monika Hinteregger, editor, Cambridge University Press, 2008).

Ireland does not have a procedure for handling claims for compensation although if it accepts membership of OPOL as financial security (as it has done at least once since April 2010), the compensation scheme under the Offshore Pollution Liability Association (OPOL) would apply.

In summary, liability for pure financial loss for compensation for harm from pollution from an offshore oil and gas incident does not, as a general rule, exist under Irish law. Even if it does exist, pure economic loss is not generally recoverable. Fault would apply to claims for harm from pollution from an offshore oil and gas incident.

x. Italy

Liability for bodily injury and property damage is imposed by the Italian Civil Code.

The Civil Code does not include a general definition of "damages". Article 2056, however, specifically includes "damage arising from loss of earnings", stating that it "shall be equitably estimated by the court according to the circumstances of the case". A claimant would need to be granted legal standing to bring the claim pursuant to article 2043 of the Civil Code. 126

As an exception to fault-based liability, the Civil Code imposes "Liability arising from the exercise of dangerous activities". This provision could potentially impose strict liability for harm from pollution from offshore oil and gas operations, although it is unclear whether such operations would be considered to be "dangerous activities". If not, fault-based liability would apply.

Italian law recognises pure economic loss subject to a claim meeting the other requisites of Italian tort law. An Italian court has awarded damages under article 2043 to a hotel that lost profits from a reduction in the number of visitors due to the presence of waste on a nearby beach. By analogy, the potential exists that Italian law may recognise claims for pure economic loss from an offshore oil and gas incident, not only for claims by commercial fisheries but also for claims by the tourism industry. This is not certain, however.

xi. Latvia

The Latvian Civil Code imposes liability for bodily injury, property damage and economic loss. It is unlikely, however, that liability for pure economic loss would apply to harm from an offshore oil and gas incident due the requirement for the loss to be direct.

It is unclear whether harm from pollution from an offshore oil and gas incident would be subject to strict liability under the Civil Code. If the strict liability provisions did not apply, the standard of liability would be fault-based.

In summary, if Latvian law imposes liability for pure economic loss, such liability probably would not apply to claims for compensation for harm from pollution from an offshore oil and gas incident unless the loss was concluded to be direct. Liability may be fault-based.

xii. Lithuania

The Lithuanian Civil Code imposes liability for bodily injury and property damage. The Civil Code may impose liability for pure economic loss provided that the loss is direct, but it is not clear whether the relevant provision refers to consequential economic loss rather than pure economic loss.

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¹²⁶ See Environmental Liability and Ecological Damage in European Law 524 (Monika Hinteregger, editor, Cambridge University Press, 2008).

In addition, the Law on Environmental Protection, Lithuania's framework environmental law imposes liability for bodily injury, property damage and potentially pure economic loss. The Law applies to the continental shelf and exclusive economic zone as well as the territorial sea and inland areas.

In summary, Lithuanian law may impose liability for pure economic loss if the loss is direct but this is uncertain. Lithuania's framework environmental law may impose liability for pure economic loss but, again, this is uncertain.

xiii. Malta

The Civil Code of Malta imposes liability for bodily injury and property damage.

The Civil Code imposes liability for economic loss (material damages); article 1045(1) provides that the damage for which a person is liable is "the actual loss which the [defendant's] act shall have directly caused to the injured party". This provision covers both damages actually incurred as well as future earnings.

Liability is fault-based. Malta does not have relevant specific legislation that imposes liability for dangerous activities.

In summary, Maltese law imposes liability for pure economic loss, which must be direct. Liability is fault based. 127

xiv. The Netherlands

The Civil Code, which imposes liability for bodily injury, property damage and economic loss, is generally fault-based. However, the Code includes provisions imposing strict liability for mining works, which applies to harm from pollution from an offshore oil and gas incident.

The Dutch law of torts does not specifically state that pure economic loss is recoverable but neither does it state that it is not recoverable. Dutch courts decide whether to award pure economic loss on a case by case basis depending on the facts of each case.

Lost income from pollution from an offshore oil and gas incident appears to be recoverable. One commentator noted that "fishermen whose earning capacity had been adversely affected by an oil spill in a coastal area [had] been awarded damages as compensation for individual economic losses (i.e. loss of earning capacity)". ¹²⁸ Another commentator also considered that damages could be awarded in the hypothetical case of a loss in revenue by a hotel located next to a lake that was not owned by the hotel when tourists stayed away from the hotel due to a tortfeasor having polluted the lake. The commentator stated that the Explanatory Memorandum on the rules regarding liability for dangerous substances suggested that damages could be recoverable in such a case. ¹²⁹

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¹²⁷ Comments (and information) by Charles Galea, Continental Shelf Department, Office of the Director General, Malta (15 September 2014).

¹²⁸ See Environmental Liability and Ecological Damage in European Law 504 (Monika Hinteregger, editor, Cambridge University Press, 2008).

¹²⁹ J.M. Barendrecht, Pure Economic Loss in the Netherlands 115, 128, in Netherlands Reports to the Fifteenth International Congress of Comparative Law (E.H. Hondius, editor, Intersentia Rechtswetenschappen, 1998) (referring to pages 18-19 of the Explanatory Memorandum on the rules regarding liability for dangerous substances).

In summary, Dutch law imposes liability for pure economic loss. A claim by fishermen for lost income from an oil spill has succeeded in the past. Claims by the tourism industry for lost income may also succeed.

xv. Norway

Norway has a well-developed and sophisticated regime for compensating persons who suffer bodily injury, property damage and economic loss from offshore oil and gas operations. The Petroleum Act, which channels liability to the licensee, specifically includes pure economic loss.

Further, there are specific provisions for claims by fishermen. Section 8-3 of the Petroleum Act provides that a licensee is strictly liable for financial loss suffered by Norwegian fishermen resulting from pollution and waste from petroleum activities. The financial loss includes:

- the reasonable cost of measures taken by the fishermen to avert or limit the damage or loss;
- any financial loss from such measures;
- damage and inconvenience as a result of supply vessels and support vessel traffic; and
- relocation of the facility to or from the relevant fishing field.

The licensee has a right of recourse against the person who actually caused the loss or the owner of a ship providing that the relevant conditions of liability have been satisfied.

Claims for pollution damage from offshore oil and gas operations must be brought under the Petroleum Act. If the Petroleum Act does not apply to a claim, the claim may be brought under the Pollution and Waste Act or the Act Relating to Compensation in Certain Circumstances, as applicable.

The Petroleum Act does not apply in Svalbard. Instead, the Svalbard Act applies. That Act imposes strict liability "to pay compensation ... for economic loss resulting from the environmental damage" caused by that person due to breaching provisions of the Act.

In summary, Norway has a highly developed liability system established by the Petroleum Act for claims for compensation from offshore oil and gas incidents. Liability under the Act includes liability for pure economic loss. Further, liability is strict, it is channelled to licensees and claims from offshore oil and gas incidents must be brought under the Act if it applies. Legislation that applies to Svalbard also imposes liability for economic loss arising from an offshore oil and gas incident.

xvi. Poland

The Polish Mining Law, which applies to the exploration and production of hydrocarbons as well as other minerals, imposes liability for property damage; it does not impose liability for bodily injury and does not appear to impose liability for pure economic loss.

The Polish Civil Code imposes liability for bodily injury and property damage. Liability is also imposed for pure economic loss but only for compensation for lost profits when there is a high probability of their loss. As a practical matter, therefore, a claimant will face difficulty in proving entitlement to lost profits.

Although the Civil Code appears to be liberal in respect of a cause of action for pure economic loss, Polish courts and scholars have concluded that limitations apply. That is, article 361(1) of the Civil Code states that liability applies only to compensation for the "normal consequences" of an act or omission. Further, article 446 states that specified persons, usually relatives of a deceased, may claim compensation for their losses resulting from the death of the deceased. In this respect, Polish courts and scholars consider that article 446 proves that there is an opposite rule under the Civil Code to

which article 446 is an exception. That is, only the person *directly* injured by the act of a tortfeasor is entitled to claim compensation. Commentators considered that the application of either or both of these limitations would result in a person who suffered damage for lost profits from a hypothetical closure of cattle and meat markets due to the tortfeasor's negligence in allowing infected cattle to escape being unable to recover its loss. ¹³⁰ This hypothetical can be analogised to persons suffering lost income due to water pollution. ¹³¹

The strict liability provisions for dangerous activities in the Civil Code may apply to a claim for harm from offshore oil and gas operations but this is unclear.

In summary, Polish law may impose liability for pure economic loss but only if there is a high probability of the loss from the tort. Only persons who have suffered direct damage would be able to claim. Liability is probably fault-based but this is not clear.

xvii. Portugal

The Portuguese Civil Code imposes liability for bodily injury and property damage. Liability is fault-based because the strict liability provisions do not appear to apply to claims for pollution from offshore oil and gas operations.

Article 564(2) of the Civil Code imposes liability for consequential losses that are "predictable". Such losses could include lost profits from fisheries and tourism due to water pollution from an offshore oil and gas incident provided the economic losses are a direct consequence of the water pollution and are consequential, ¹³² that is, consequential, not pure economic, loss.

More crucially, one commentator considered that article 483 of the Civil Code could impose liability for pure economic loss in the form of lost profits by fishermen and owners of tourism facilities ¹³³ but not for the lost profits of the local distributor of drinks to tourism facilities. ¹³⁴

In Decree-Law No. 147/2008, which implemented the ELD into national law, Portugal introduced civil liability for compensation for environmental damage (the only Member State to do so). Strict liability under the legislation applies to operators who produce oil, in particular, the holders of a licence to produce offshore oil. The legislation appears to impose liability for compensation for bodily injury and property damage but not pure economic loss.

A further Portuguese law, Law 11/87, may impose strict liability for bodily injury and property damage from pollution from offshore oil and gas operations if such operations are considered to be a "particularly dangerous activity".

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¹³⁰ See Vernon Valentine Palmer and Mauro Bussani, Pure Economic Loss: The Ways to Recovery, Netherlands Comparative Law Association, Electronic Journal of Comparative Law, vol. 11(3), 66-67 (December 2007); available at http://www.ejcl.org/113/article113-9.pdf

¹³¹ See Vernon Valentine Palmer and Mauro Bussani, Pure Economic Loss: The Ways to Recovery, Netherlands Comparative Law Association, Electronic Journal of Comparative Law, vol. 11(3), 66-67 (December 2007)(see page 13; analogising chemical spill to a hypothetical concerning a person who negligently allows infected cattle to escape, resulting in the Government ordering the closure of cattle and meat markets).

¹³² See Environmental Liability and Ecological Damage in European Law 525 (Monika Hinteregger, editor, Cambridge University Press, 2008).

¹³³ See Environmental Liability and Ecological Damage in European Law 525 (Cambridge University Press, Monika Hinteregger, editor, 2008).

¹³⁴ See Environmental Liability and Ecological Damage in European Law 552 (Cambridge University Press, Monika Hinteregger, editor, 2008).

Further, the same commentator who commented on the Civil Code (above) considered that articles 22 or 23 of Law No. 83/95 of 31 August 1995 impose liability on a hypothetical person who polluted a river in respect of a claim by the owner of an outdoor recreation business that had organised rafting and canoeing tours on a nearby river for 10 years for a total loss of profits for three years during which time the river could not be used for white water canoeing and rafting. By analogy, at least some claims for lost profits from pollution from an offshore oil and gas incident should also succeed.

In summary, Portuguese law may impose liability for pure economic loss but only if the loss is direct. Law 11/87 and Law 83/95 may impose strict liability for bodily injury and property damage but this is unclear.

xviii. Romania

The Romanian Petroleum Law states that the applicable law for "damages caused ... to third parties arising from the conduct of petroleum operations" is "delictual fault civil responsibility". That is, only fault-based liability applies; strict liability does not apply.

The relevant law for torts for harm from an offshore oil and gas incident is the New Civil Code, which entered into force on 1 October 2011. The New Civil Code imposes liability for bodily injury and property damage. claims for pure economic loss are recognised, but cover for them is limited due to the requirement to meet other requisites of Romanian tort law.

xix. Spain

The Spanish Civil Code imposes liability for bodily injury and property damage. The strict liability sections of the Civil Code would not apply to a claim for compensation from harm from an offshore oil and gas incident.

A judgment by the Spanish Supreme Tribunal indicates difficulties that may be encountered in claims for property damage for shellfish from an oil spill. Following a spill of oil by the tanker *Compostilla*, in the port of La Coruña in January 1972, owners of a mussel farm claimed damages due to their inability to sell mussels due to them tasting of oil from oil residues on the seabed. The court ruled against the claimants, stating that they should have destroyed the mussels on orders of the local authorities instead of trying to place them on the market. ¹³⁶

Spanish law does not specifically recognise pure economic loss. Under Spanish law, the damage suffered by a claimant must be certain and adequately proven or the causal link between the tortfeasor's conduct and damage to the claimant must be established. As a result of this requirement, courts tend not to state that compensation for pure economic loss is not recoverable. Rather, they state that the claimant has not established damage or causation.

If, therefore, a person in, say, the fisheries industry or the tourism industry, could show that economic losses suffered by him from pollution caused by an offshore oil and gas incident were "foreseeable"

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¹³⁵ Environmental Liability and Ecological Damage in European Law 506 (Monika Hinteregger, editor, Cambridge University Press, 2008).

¹³⁶ See Environmental Liability and Ecological Damage in European Law 558 (Monika Hinteregger, editor, Cambridge University Press, 2008) (referring to STS 19.6.1980 [RJ 1980/2410]).

and could also meet strict requirements of Spanish law, that person could recover. Although such recovery is possible in principle, it is not necessarily probable. 137

Claims by businesses in the fisheries and tourism industries following the oil spill by the *Aegean Sea* off the coast of Galicia in 1992 indicate that such claims would not necessarily succeed. In those claims, which would have been brought under Spanish law implementing marine Conventions (and, thus, legislation that imposes liability for pure economic loss), the Court of Appeals held against the fishermen and other maritime workers, concluding that they had relied on speculation and had not sufficiently specified the negative effects of the spill and its economic consequences for them.¹³⁸

In summary, liability for pure economic loss appears to be imposed by Spanish law but stringent criteria apply including a requirement for a claimant to show that its loss is foreseeable, certain and adequately proven.

xx. United Kingdom

Claims for bodily injury and property damage in the UK are mostly brought in negligence rather than under law that imposes strict liability.

The applicable law for a claim for compensation for traditional damage does not provide for pure economic loss. Claims by fishermen, persons in the tourism industry and other persons who suffered economic loss would not, therefore, be covered unless such persons had suffered damage to property in which they had a legal interest, or bodily injury.

Even if a person suffered property damage or bodily injury from pollution from offshore oil and gas operations, consequential economic loss does not appear to be covered or, at the least, is limited. For example, if a fish farmer suffered property damage due to oil pollution to some, but not all, of the farmed fish, the loss of income from the inability to sell unharmed fish seems highly unlikely to be covered because it is not consequential damage.

OPOL complements UK law by providing for compensation for "pollution damage" and "remedial measures", with costs of the latter being limited to public authorities. Compensation for "pollution damage" is limited to damage from "oil"; it does not include damage from other chemicals or dispersants.

OPOL also provides a compensation scheme. Membership of OPOL is mandatory for licensees of offshore oil and gas operations in the UK (see UK summary, section 1.1.2).

In summary, the relevant liability law in the UK is fault-based does not cover pure economic loss. OPOL covers a broader range of claims from offshore oil and gas incidents under a strict liability rule.

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¹³⁷ See Vernon Valentine Palmer and Mauro Bussani, Pure Economic Loss: The Ways to Recovery, Netherlands Comparative Law Association, Electronic Journal of Comparative Law, vol. 11(3), 41 (December 2007); available at http://www.ejcl.org/113/article113-9.pdf

¹³⁸ See Environmental Liability and Ecological Damage in European Law 516 (Monika Hinteregger, editor, Cambridge University Press, 2008).

ANNEX IV. FINANCIAL SECURITY INSTRUMENTS ACCEPTED BY COMPETENT AUTHORITIES IN THE 20 FOCAL STATES TO COVER THIRD-PARTY DAMAGE FROM OFFSHORE OIL AND GAS ACTIVITIES

i. Bulgaria

Neither the Bulgarian Concessions Act nor the Underground Resources Act sets out the financial security required for a prospection and exploration permit. Any financial security that is required is specified by the permit itself.

Two types of financial security are required for a concession agreement. They are: financial security for a candidate for a concession to cover its bid and financial security for the successful candidate to cover its obligations under the agreement itself.

It is unclear whether the holder of a prospection and exploration permit, or a concession agreement, must have financial security for compensation for claims for bodily injury and property damage and, perhaps, pure financial loss. If there is such a requirement, which is not specified in legislation, the financial security instrument to cover it appears to be insurance.

ii. Croatia

Three types of financial security apply to offshore oil and gas operations in Croatia: a bank guarantee to accompany a bid under the first offshore licensing round; an irrevocable and unconditional bank guarantee / performance bond for carrying out the works programme under the agreement; and insurance for, among other things, bodily injury, property damage and other losses.

Offshore oil and gas activities are highly reliant on the political context. Such activities bring in money for the State and increase employment as well. Croatia is currently in the same situation that Greece or Spain were economically speaking and unemployment is quite high. It is therefore easier at the moment (June 2014) for foreign companies to get an exploration or production licence due to the need for foreign investment in Croatia. Rules are therefore more lenient than in some other States. In this respect, it is up to the Government and the applicant to negotiate entirely the contract for offshore oil and gas activities.

iii. Cyprus

There are two requirements in Cyprus for financial security for offshore oil and gas operations under the Hydrocarbon (Prospection, Exploration and Exploitation) Law of 2007 (No. 4(I)/2007): an irrevocable bank guarantee in respect of carrying out the works programme and insurance for compensation to third parties and damage to the environment.

The 2012 Model Contract specifies that the Minister will review and, if satisfactory, approve the insurance policies for exclusions and will verify the financial capacity of insurers.

iv. Denmark

The Model Licence requires a licensee to submit "security, possibly in the form of a parent company guaranty, in an amount and of a nature that is acceptable to the [Danish Energy Agency]". This type of financial security is to ensure the licensee's performance of its obligations under the licence.

The licensee's liability for damages for "any loss, damage or injury caused by the activities carried on under the licence", as imposed by the Subsoil Act, must be covered by insurance, which must "provide reasonable coverage, in light of the risks involved in the operation of the business and the premiums to be paid".

Insurance for companies is currently subject to consideration whether or not to change the amounts of insurance for financial capacity. Such changes could have impacts in licensee groups, as companies might have to pay higher amounts for insurance. One commentator stated that the OSD seems to make it more difficult to operate offshore oil and gas activities for smaller companies.

v. France

The legislative provisions concerning financial security for mining activities in France, including offshore oil and gas operations, are lax. They are, however, being revised to be more stringent as part of the reform of the Mining Code. The financial security requirements in the current Code appear to apply only to works programmes and not compensation for bodily injury, property damage or economic loss.

vi. Germany

Germany requires applicants for offshore oil and gas operations to have evidence of financial security. The main financial security requirements are for the work programme, with the competent authority reviewing financial capability in closer detail when it reviews the operating plan for works to be carried out under the mining permit. The financial security instrument for compensation for bodily injury, property damage and economic loss in the event of a pollution incident, if required, is insurance.

vii. Greece

The Greek Hydrocarbons Law and the Model Agreement set out detailed provisions for financial security. The mandatory requirements mainly concern financial security for the works programme and obligations under the lease and exploration and exploitation licences.

A deposit guarantee or insurance is also required, although the requirements appear to relate to environmental, rather than traditional, damage.

In addition, insurance in accordance with "Good Oilfield Practices", is required. This requirement appears to include insurance for compensation for harm from an offshore oil and gas incident.

Further, social security insurance, which would apply to employees of persons responsible for harm to employees, is specifically required.

viii. Iceland

Holders of offshore exploration and production licences in Iceland are required to have financial security in the form of a bank guarantee. If the licensee has a parent company, a parent company guarantee, to cover obligations under the licence is required.

In addition, the licensee must have insurance, performance bonds or other financial security acceptable to the competent authority for liability for any damage that may be caused by exploration, exploitation and production activities, or their non-performance, including environmental damage. The insurance, or other financial security, must specifically cover, among other things, pollution damage and other liability to third parties as well as employees' liability insurance

ix. Ireland

The Irish Petroleum and Other Minerals Development Act requires an applicant to post a performance bond or guarantee to carry out the work programme itself. As a practical matter, guarantees have been accepted but not a bond.

The financial security requirements for compensation for claims by third parties for bodily injury and property damage are minimal. The financial security specified for such claims is insurance, with the Minister having the discretion not to require financial security or to accept other types of financial security such as self-insurance. Since 2010, the Minister has accepted membership of OPOL as financial security in respect of a shallow and a deep-water well by a smaller operator.

x. Italy

Italy requires applicants for exploration and production licences to be financially capable of carrying out the works programme. The focus is on financial security for the works programme, not compensation for claims from bodily injury, property damage and economic loss. Italy is, however, reviewing financial security requirements as part of the implementation of the OSD with a view to imposing more stringent requirements.

xi. Latvia

The Latvian Law on Subterranean Depths does not include provisions that mandate financial security for offshore oil and gas operations, although such provisions may well be included in prospecting and/or exploration and production licences.

xii. Lithuania

The Lithuanian Law on Subsoil does not include any requirements for financial security for offshore oil and gas operations. The production sharing agreement, which accompanies an exploration and production permit, is likely to include such provisions.

xiii. Malta

The Maltese Petroleum (Production) Act does not set out requirements for mandatory financial security for offshore oil and gas operations in legislation. Instead, the requirements are set out in the Model Production Sharing Contract (2001) and the Model Exploration Study Agreement (2001). The model agreements are available on request to the Department of Transport and Infrastructure by oil companies that have shown an interest in entering into a licence.

xiv. Netherlands

Neither the Dutch Mining Act nor any other legislation imposes mandatory financial security requirement for compensation for bodily injury, property damage and economic loss involving offshore oil and gas operations. The financial security provisions in the Mining Act relate only to financial security for the discharge of payments and obligations under a licence. Such financial security is rarely imposed.

xv. Norway

The JOA into which a licensee for offshore oil and gas operations in Norway must enter sets out the financial arrangements between the parties to it, the work programmes and insurance requirements.

The Norwegian Petroleum Act requires the person to whom a licence is granted to "provide such security as approved by the Ministry for fulfilment of the obligations, which the licensee has undertaken, as well as for possible liability in connection with the petroleum activities".

Financial security for third-party claims for compensation for bodily injury, property damage and economic loss is in the form of insurance.

In practice, most companies (that is, subsidiaries of foreign companies) provide parent company guarantees for financial security for their obligations under the licence; very few companies provide other types of guarantees. However, such a guarantee is not required officially in the Norwegian texts; it is only very common in practice.

xvi. Poland

Mining concessions in Poland do not include a requirement for financial security. Instead, the system is flexible. The Polish Ministry of Environment considers applications on a case-by-case approach and may require a bank guarantee or collateral or other type of guarantee.

Further, there are no other obligations that provide for financial security in respect of licences for hydrocarbons except for a liquidation fund for mining to ensure the decommissioning of mines. The Ministry of Environment considers the financial standing of an applicant for a licence and its ability to finance the work programme during the licensing process, including any parent guarantees.

xvii. Portugal

Decree-Law 109/94 requires applicants who bid for the right to carry out prospecting, exploration, development and production activities in Portugal to submit a programme for the proposed work that includes "an estimate of the respective costs and information on the sources of financing". Entities that apply for a concession must post a provisional bond and, if a concession or licence is granted, must post a bond to cover obligations under the concession or licence.

The Decree-Law does not require a bond or other financial security to be posted for compensation for bodily injury, property damage or economic loss caused by a pollution incident from offshore oil and gas operations.

xviii. Romania

Neither the Romanian Petroleum Law nor the Methodological Rules include any requirements for financial security. The competent authority's website states that a bank guarantee is required for a petroleum agreement, to cover the "timely performance of the minimum exploration program". There is no indication of a requirement for financial security for a prospecting permit although this may be specified in the permit itself. Further, there is no legislative requirement for financial security to cover compensation for claims for bodily injury, property damage or economic loss under a petroleum agreement.

xix. Spain

The Spanish Ministry of Industry, Energy and Tourism requires financial security in the form of a guarantee for the works programme, to include investment, taxation, social security and restoration obligations, as well as obligations arising from the research programme. The Ministry also requires civil liability insurance to cover possible damage or loss caused to people or property as a result of the oil and gas activities.

xx. United Kingdom

Financial security is required in the UK "to discharge any liability for damage attributable to the release or escape of Petroleum in the course of activities connected with the exercise of rights granted by the licence".

Prior to Deepwater Horizon, a person who carried out offshore oil and gas activities was required to have financial security only as specified under OPOL. Following Deepwater Horizon, the UK Government considered that the limit of liability of \$250 million (EUR 182.57 million) under OPOL, even though it had been increased from \$120 million (EUR 88.070 million), may not be sufficient to pay all claims arising from an offshore oil spill, in particular because financial security under OPOL

does not cover the cost of drilling a relief well. The Department of Energy & Climate Change (DECC), therefore, issued a short guidance note (DECC Guidance) concerning the financial security that must be demonstrated prior to consent being granted for exploration and appraisal wells on the UK continental shelf. The financial security requirements do not apply only to harm caused by pollution. Other requirements include financial security for plugging and abandoning a well.

The DECC Guidance provides, among other things, that "[t]he level of financial responsibility that companies need to demonstrate for any particular well should be calculated by establishing the combined cost of well control and cost of financial remediation and compensation from pollution".

The DECC Guidance further states that evidence of financial responsibility may be provided by: "reliance on credit/financial strength rating of the operator or co-venturer; insurance; parent company guarantee/affiliate undertaking; and any combination of the above". The Guidance does not specify the type of financial security that is specifically required for compensation for traditional damage.

The mechanisms for financial security under OPOL are specified credit ratings by specified credit rating agencies, a parent company (or other company) guarantee, insurance of a minimum of \$250 million (EUR 182.57 million), or a combination of the mechanisms.