CIVIL LIABILITY AND FINANCIAL SECURITY FOR OFFSHORE OIL AND GAS ACTIVITIES

Civil Liability and Financial Security for Offshore Oil and Gas Activities provides insights into the liability and compensation regime for offshore-related damage. This book analyzes the legal regime in a number of countries (including the United States and the United Kingdom) as well as the EU regime. In addition, the various compensation mechanisms and amounts available today to compensate offshore-related damage are described and critically analyzed. Moreover, based on in-depth interviews with a wide variety of relevant stakeholders, including insurers, representatives from supervisory authorities, and oil and gas producers, this volume also provides a variety of policy recommendations formulated to provide an optimal compensation regime for offshore-related damage.

MICHAEL FAURE is Professor of Comparative Private Law and Economics at Erasmus University Rotterdam and Professor of Comparative and International Environmental Law at Maastricht University. He serves also as Academic Director of the Maastricht European Institute for Transnational Legal Research (METRO).

CIVIL LIABILITY AND FINANCIAL SECURITY FOR OFFSHORE OIL AND GAS ACTIVITIES

Edited by

MICHAEL FAURE

Universiteit Maastricht, Netherlands

CAMBRIDGE UNIVERSITY PRESS

CAMBRIDGE
UNIVERSITY PRESS

University Printing House, Cambridge CB2 8BS, United Kingdom

Cambridge University Press is part of the University of Cambridge.

It furthers the University's mission by disseminating knowledge in the pursuit of education, learning, and research at the highest international levels of excellence.

www.cambridge.org
Information on this title: www.cambridge.org/9781107167162

First published 2017

A catalogue record for this publication is available from the British Library.

Library of Congress Cataloging-in-Publication Data
Faure, Michael (Michael G.) editor.
Civil liability and financial security for offshore oil and gas activities / edited by Michael Faure.
New York : Cambridge University Press, 2016.
LCCN 2016023670 | ISBN 9781107167162 (hardback)
LCSH: Liability for oil pollution damages. | Oil pollution of the sea – Law and legislation. | Offshore oil well drilling – Law and legislation. | Offshore gas well drilling – Law and legislation. | Oil and gas leases. | Liability (Law). | Compensation (Law). | BISAC: LAW / Civil Law.
LCC K956 .C58 2016 | DDC 343.07/72–dc23
LC record available at https://lccn.loc.gov/2016023670

ISBN 978-1-107-16716-2 Hardback

CONTENTS

FIGURES AND TABLES

Figures

Tables

CONTRIBUTORS

KRISTEL DE SMEDT
Maastricht University, Netherlands

MICHAEL FAURE
Maastricht University and Erasmus School of Law Rotterdam, Netherlands

JING LIU
Wuhan University, China, and Erasmus School of Law Rotterdam, Netherlands

NIELS PHILIPSEN
Maastricht University and Erasmus School of Law Rotterdam, Netherlands

HUI WANG
Maastricht University, Netherlands

PREFACE AND ACKNOWLEDGEMENTS

On April 20, 2010, the world was shocked when an accident occurred at the mobile deep-water offshore rig Deepwater Horizon in the Gulf of Mexico, leading to an unprecedented spill that continued for several months with a total loss of several million barrels of oil. Immediately after the incident, the obvious question was asked whether the operator (BP) could be held liable to compensate for the damage that resulted from the incident. In the immediate aftermath of the disaster, steps were taken to force BP to make funds available for compensation of the victims in the light of its obligations under the US Oil Pollution Act. However, in other jurisdictions the question also arose as to how liability and compensation for the consequences of such an incident would be regulated. It appeared that whereas oil spills resulting from tankers had been largely regulated, to some extent to the surprise of many, there was no international convention with respect to civil liability and compensation for damage resulting from offshore oil and gas activities. This also led to great concern within the European Union and resulted, *inter alia*, in legislative action by the European Commission leading to a Directive (2013/30/EU of June 12, 2013) on the safety of offshore oil and gas operations. At the same time, the European Commission also commissioned an in-depth study into the liability and compensation for damage resulting from offshore oil and gas activities, where these activities occur in European waters. This study started in the fall of 2012, and the results were delivered in October 2013. Subsequently, the team of writers has substantially revised and updated the policy report into an academic study, of which this book is the result.

The aim of this book is not only to provide insights, *inter alia*, by focusing on past incidents, on the risks related to offshore incidents but also to provide an in-depth analysis of existing legal regimes at both the international and EU levels, as well as by analyzing various domestic legal regimes. This book equally analyzes how currently (through a variety of financial and insurance instruments) the liability for damage resulting

from a major offshore accident is covered. In addition to describing the status quo, this book also analyzes, taking both an empirical and a theoretical (law and economics) approach, how the compensation of damage following a major offshore accident could be arranged. The analysis in this book focuses on the question of how (using a variety of compensation mechanisms in combination), on the one hand, a high amount of compensation could be provided and, on the other hand, how various compensation mechanisms could equally provide effective incentives to prevent major offshore accidents.

Because the questions addressed in this book go beyond a simple legal analysis, the team of authors constituted lawyers (Faure, Liu, and Wang) and economists (Philipsen and De Smedt). Because our aim was not only to provide an academic study but also to obtain detailed insights into the scope of offshore-related risks and the compensation mechanisms available, more than twenty interviews were held with relevant stakeholders (listed in Appendix 1). We are grateful to the stakeholders we interviewed for the valuable information they provided, which substantially contributed to the quality of the final result. During the earlier phase of the collaboration with the European Commission, we benefited from interesting insights and comments provided by collaborators at the Commission. We are grateful to all of them and, in particular, to Eero Ailio, Arthur van Daelen, Xavier Goulay, Jorg Koehli, and Taf Powell.

Obviously, the usual disclaimer applies, implying that the contents of this book obviously do not bind the European Commission in any way and that all errors are ours alone.

We are equally grateful to Marjo Mullers and Marina Jodogne (METRO, Maastricht University) for editorial assistance, as well as to the team at Cambridge University Press for a pleasant collaboration in the preparation of this manuscript for publication.

We truly hope that with this book we can provide a modest contribution to improving the safety of offshore oil and gas activities and to an adequate compensation of victims.

ABBREVIATIONS

ACV	actual cash value
AEC	Atomic Energy Commission (US)
AIPN	Association of International Petroleum Negotiators
AMSA	Australian Maritime Safety Authority
ANI	American Nuclear Insurers
ANP	National Petroleum Agency (Brazil)
AtG	Atomgesetz
AUD	Australian dollar
Barcelona Convention	Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean
BAT	best available techniques
bio.	billion
BOE	barrels of oil equivalent
BOEM	Bureau of Ocean Energy Management
BOEMRE	Bureau of Ocean Energy Management, Regulation and Enforcement
BOP	blowout preventer
BP	British Petroleum
BSEE	Bureau of Safety and Environmental Enforcement (US)
Bucharest Convention	Convention for Cooperation in the Protection of the Black Sea Against Pollution 1992
CBT	contingent business interruption
CCC	care, custody, or control
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act (US)
CESE	Conseil Économique, Social et Environnemental
CFR	Code of Federal Regulations (US)
CGAA	Coast Guard Authorization Act (US)
CGMTA	Coast Guard and Maritime Transportation Act (US)
CLC	International Convention on Civil Liability for Oil Pollution Damage

CLEE	The Convention of Civil Liability for Oil Pollution Damage Resulting from Exploration for and the Exploitation of Seabed Mineral Resources
COFR	certificate of financial responsibility
COPE	Compensation for Oil Pollution in European Waters
CRISTAL	Contract Regarding an Interim Supplement to Tanker Liability for Oil Pollution
CSC	Convention on Supplementary Compensation for Nuclear Damage
CSSP	court-supervised settlement program
CWA	Clean Water Act (US)
DEA	Danish Energy Agency
DECC	Department of Energy and Climate Change (UK)
DEFRA	Department for Environment, Food and Rural Affairs (UK)
DEM	Deutsche mark
DEPA	Danish Environmental Protection Agency
DMITRE	Department of Manufacturing, Innovation, Trade, Resources and Energy
DNV	Det Norske Veritas
DOE	Department of Energy (US)
DOI	Department of the Interior (US)
DOJ	Department of Justice (US)
DUC	Dansk Undergrunds Consortium
EED	Energy Exploration and Development (Insurance)
EEZ	exclusive economic zone
EIA	Energy Information Administration (US)
ELD	Environmental Liability Directive
ELINI	European Liability Insurance for the Nuclear Industry
EMANI	European Mutual Association for Nuclear Insurance
EMSA	European Maritime Safety Agency
ENI	Italian Hydrocarbons Agency
ENO	extraordinary nuclear occurrence
EPA	Environmental Protection Agency (US)
EU	European Union
EUR	euro
FERC	Federal Energy and Regulatory Commission (US)
FR	Financial Responsibility Form
Fund Convention	International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage
GCCF	Gulf Coast Claims Facility (US)

GT	tonnage of ship
HCRs	hydrocarbon releases
Helsinki Convention	Convention for the Protection of the Marine Environment of the Baltic Sea Area 1992
HP	high-pressure wells
HSE	Health and Safety Executive (UK)
HT	high-temperature wells
IADC	International Association of Drilling Contractors
IAEA	International Atomic Energy Agency
IAT	incident analysis team
IEA	International Energy Agency
IMO	International Maritime Organization
IMR	Institute of Maritime Research
INPO	Institute of Nuclear Power Operations
INTERTANKO	International Association of Independent Tanker Owners
IOPC Fund	International Oil Pollution Compensation Fund
IRF	International Regulators' Forum
IRMI	International Risk Management Institute
ITRE	European Parliament's Committee on Energy
IUMI	International Union of Marine Insurance
J&S	joint and several liability
JNCC	Joint Nature Conservation Committee
JOA	joint operating agreement
JRC	Joint Research Centre
Klif	Climate and Pollution Agency (Norway)
KPI	key performance indicator
LNG	liquefied natural gas
LOGIC	Leading Oil Government's Oil and Gas Industry Task Force
LTA	lost-time accident
MAERP	Mutual Atomic Energy Re-Insurance Pool
MARPOL 73/783	1973 International Convention for the Prevention of Pollution from Ships as Amended by the Protocol 1978
MCA	Maritime and Coastguard Agency (UK)
MDL	multidistrict litigation
MEP	Member of the European Parliament
MIA	Mutual Indemnity Agreement
mio.	million
MIT	Massachusetts Institute of Technology
MMS	Minerals Management Service (US)
MODU	mobile offshore drilling unit
MOEX	Mitsui Oil Exploration Company

MOPU	mobile offshore production units
MOU	memorandum of understanding
MPE	Ministry of Petroleum and Energy (Norway)
MRF	mutual response fund
NatCats	natural catastrophes
NCA	Norwegian Coastal Administration
NEA	Nuclear Energy Agency
NEB	National Energy Board (Canada)
NEIL	Nuclear Electric Insurance Limited
NELIA	Nuclear Energy Liability Insurance Association
NFWF	National Fish and Wildlife Foundation
NGO	nongovernmental organization
NINA	Norwegian Institute for Nature Research
NM	nautical mile(s)
NOAA	National Oceanic and Atmospheric Administration (US)
NOGEPA	Netherlands Oil and Gas Exploration and Production Association
NOK	kroner (Norway)
NOPSEMA	National Offshore Petroleum Safety and Environmental Management Authority (Australia)
Nordic Convention	Nordic Environmental Protection Convention
NPCA	Norwegian Pollution Control Authority
NPD	Norwegian Petroleum Directorate
NPDES	National Pollutant Discharge Elimination System (US)
NPFC	National Pollution Fund Centre (US)
NRC	Nuclear Regulatory Commission
NSOAF	North Sea Offshore Authorities Forum
OCES	Operators' Co-operative Emergency Services
OCIL	Oil Casualty Insurance Limited
OCS	outer continental shelf
OCSLA	Outer Continental Shelf Lands Act
OECD	Organization for Economic Cooperation and Development
OEE	operators extra expense (insurance policy)
Offshore Protocol	Protocol for the Protection of the Mediterranean Sea Against Pollution Resulting from Exploration and Exploitation of the Continental Shelf and the Seabed and Its Subsoil, 1994
OGP	International Association of Oil and Gas Producers
OIL	Oil Insurance Limited
OOG	Overlegorgaan Olie en Gas (Netherlands)
OPA	Oil Pollution Act 1990 (US)

OPEC	Organization of the Petroleum Exporting Countries
OPEP	Oil Pollution Emergency Plan (UK)
OPGGSSA	Offshore Petroleum and Greenhouse Gas Storage Act (Australia)
OPOL	Offshore Pollution Liability Agreement
OPRC Convention	International Convention on Oil Pollution Preparedness, Response, and Cooperation 1990
OSCAR	Oil Spill Contingency and Response
OSFR	Oil Spill Financial Responsibility for Offshore Facilities
OSIS	Oil Spill Information System
OSLTF	Oil Spill Liability Trust Fund (US)
OSPAR Convention	Convention for the Protection of the Marine Environment of the North-East Atlantic of 1992
OSPRAG	Oil Spill Prevention and Response Advisory Group
PAA	Price-Anderson Act (US)
P&I Clubs	Protection and Indemnity Clubs
PLA	public liability action
PSA	Petroleum Safety Authority (Norway)
PTTEP	PTT exploration and production
PTTEP AA	PTTEP Australasia
RCV	replacement-cost value
REG	regulation
RWC	restricted work cases
RWS NZ	Rijkswaterstaat Noordzee (Netherlands)
SDFI	State's Direct Financial Interest (Norway)
SDR	Special Drawing Rights
SEC	Securities and Exchange Commission
SEMS	Safety and Environmental Management System
SFS 1968:45	Swedish Nuclear Liability Act
SIR	self-insured retention
SL	strict liability
SLA	Submerged Lands Act 1953
SOS	sudden oil spill
SPV	special-purpose vehicle
SSM	State Supervision of Mines (Netherlands)
STOPIA	Small Tanker Oil Pollution Indemnification Agreement
TOPIA	Tanker Oil Pollution Indemnification Agreement
TOVALOP	Tanker Owners Voluntary Agreement Concerning Liability for Oil Pollution
UK	United Kingdom
UN	United Nations
UNCLOS	United Nations Convention on the Law of the Sea

UNEP	United Nations Environment Program
US	United States
US$	US dollars
VoOs	vessels of opportunity
WANO	World Association of Nuclear Operators
WELD	Willis Energy-Loss Database
WOAD	Worldwide Offshore Accident Databank