
Shipping, Law and the Marine Environment in the 21st Century

Emerging challenges for the Law of the Sea –
legal implications and liabilities

EDITED BY
DR RICHARD CADDELL
AND
PROFESSOR D. RHIDIAN THOMAS

SARCHI CHAIR LAW

Lawtext Publishing Limited
2013

Lawtext Publishing Limited
Office G18, Spinners Court
55 West End, Witney
OXON OX28 1NH
www.lawtext.com
Email: ltp@lawtext.com

© Richard Caddell, D. Rhidian Thomas and Contributors 2013

The moral rights of the editors and the contributors to this book have been asserted.

All rights reserved. UK statutory material in this publication is acknowledged
Crown Copyright.

No part of this publication may be reproduced or transmitted, in any form or by any means,
stored in any retrieval system of any nature without prior written permission from the
publisher, except for permitted fair dealing under the Copyright, Designs and Patents Act 1988,
or in accordance with the terms of the licence issued by the Copyright Licensing Agency in
respect of photocopying and/or reprographic reproduction. Application for permission for
other use of copyright material including permission to reproduce extracts in other published
works shall be made to the publishers in writing. In the event of permission for reproduction
being granted full acknowledgement of the author, publisher and source must be given.

Whilst every effort has been made to ensure that the information contained in this book is
correct, neither the editors and contributors nor Lawtext Publishing can accept any
responsibility for any errors or omissions, nor for any consequences that may result.
Lawtext Publishing takes no responsibility for the accuracy of URLs of external websites given
in this publication nor for the accuracy or relevance of their content.

ISBN 978-0-9539403-4-9

Published by Lawtext Publishing Limited

Typeset by
The Studio Publishing Services Limited
5 Haldon Terrace, Dawlish
Devon EX7 9LN
Email: studio@publishingservicesuk.co.uk
www.publishingservicesuk.co.uk
Printed in Great Britain

Contents

<i>Foreword</i>	v
<i>Authors' Biographies</i>	xiv
<i>Table of Cases</i>	xix
<i>Index of Treaties and Instruments</i>	xx
INTRODUCTION	
<i>Dr Richard Caddell, Professor D. Rhidian Thomas</i>	1
CHAPTER 1 THE FUTURE OF NAVIGATION IN ICE-COVERED AREAS: A VIEW FROM THE ARCTIC	
<i>Professor Tore Henriksen</i>	8
1 Introduction	8
2 The international legal framework for Arctic shipping	9
3 Present and future Arctic shipping	13
4 The regulation of Arctic shipping	15
4.1 The Arctic Council	15
4.2 IMO: from guidelines to mandatory regulations	17
4.3 Arctic coastal states	28
5 Conclusion: global regulations, regional and national implementation	33
CHAPTER 2 INTERNATIONAL STRAITS, COMPULSORY PILOTAGE AND THE PROTECTION OF THE MARINE ENVIRONMENT	
<i>Dr Edwin Egede</i>	35
1 Introduction	35
2 LOSC 1982 Part III	37
3 Environmental protection and international straits	42
4 Compulsory pilotage and international straits: the case of the Torres Strait	44
5 Legality of compulsory pilotage in international straits under the LOSC	46
6 Compulsory pilotage in international straits and state practice ...	48
7 Conclusion	51

CHAPTER 3	THE GROWING ESTABLISHMENT OF HIGH SEAS MARINE PROTECTED AREAS: IMPLICATIONS FOR SHIPPING	
	<i>Professor Robin Churchill</i>	53
1	Introduction	53
2	What is meant by a high seas marine protected area (HSMPA)?	56
3	Why are HSMPAs being called for and established?	58
4	How, legally, may an HSMPA be established?	59
5	What HSMPAs have so far been established?	62
	5.1 North-east Atlantic Ocean	62
	5.2 The Mediterranean Sea	67
	5.3 The Antarctic	69
6	How could measures regulating shipping in an HSMPA be adopted and made applicable to international shipping?	72
	6.1 The adoption of measures regulating navigation in an HSMPA by the IMO	73
	6.1.1 Ships' routeing	76
	6.1.2 Ship reporting systems	78
	6.1.3 Long-range identification and tracking of ships	79
	6.1.4 Special areas under the MARPOL Convention	79
	6.1.5 Particularly sensitive sea areas (PSSAs)	81
	6.2 The adoption of measures regulating navigation in an HSMPA not involving the IMO	82
	6.2.1 Failure to observe the measures adopted for an HSMPA could be a breach of the obligation to co-operate under Part XII of UNCLOS	83
	6.2.2 Failure to observe the measures adopted for an HSMPA could be a breach of the 'due regard' obligation of Article 87 LOSC	84
	6.2.3 In the case of the Mediterranean Sea only, coastal states may be able to make HSMPA measures applicable to ships of third states on the basis of the principle that 'they who can do more can do less'	85
7	How could measures regulating shipping in an HSMPA be enforced?	86
8	Conclusions	87
CHAPTER 4	SHIPPING AND THE CONSERVATION OF MARINE BIODIVERSITY: LEGAL RESPONSES TO VESSEL-STRIKES OF MARINE MAMMALS	
	<i>Dr Richard Caddell</i>	89
1	Introduction	89

Contents

ix

2	Marine mammals and vessel-strikes: monitoring problems and regulatory challenges	91
3	Marine mammals, the IMO and the international law of navigation	95
3.1	Navigational rights and freedoms and the Law of the Sea ..	100
3.2	Vessel-strike mitigation responses: progress and prospects ..	106
3.2.1	Vessel routeing measures	107
3.2.2	Vessel reporting measures	112
4	Coordination with international management fora	114
4.1	The International Whaling Commission	115
4.2	The Convention on Migratory Species of Wild Animals	123
4.3	Vessel-strikes and the CMS subsidiary agreements	125
5	Concluding remarks	134

CHAPTER 5 BALLAST WATER MANAGEMENT: REGULATORY CHALLENGES AND OPPORTUNITIES

<i>Dr Rosalie Balkin</i>	137	
1	Introduction	137
2	Scope of the problem	138
2.1	An international problem	140
3	Developments at the IMO	141
4	The Ballast Water Management Convention	141
4.1	The precautionary principle	144
4.2	Scope of application	145
4.3	Technical regulations	146
5	Concluding remarks	148

CHAPTER 6 MARINE SALVAGE AND THE ENVIRONMENT: DEVELOPMENTS, PROBLEMS AND PROSPECTS

<i>Professor D. Rhidian Thomas</i>	150	
1	Introduction	150
2	Some relevant fundamentals of salvage law	151
3	The law up to 1980	154
4	Post-1980 developments in the law	156
4.1	LOF 1980	157
4.2	The International Convention on Salvage 1989	159
4.2.1	Introduction	159
4.2.2	Duty of care	161
4.2.3	Assessment of salvage awards	162
4.2.4	Special compensation	163

4.3 Impact of the 1989 Salvage Convention on the LOF contract.	168
4.4 Emergence of the SCOPIC agreement	169
5 Future developments: the concept of environmental salvage	170
6 Conclusion	174
CHAPTER 7 DEALING WITH MARITIME EMERGENCIES IN THE UNITED KINGDOM: THE ROLE OF THE SOSREP	
<i>Hugh Shaw</i>	176
1 Introduction	176
2 Shipping casualties and the law of maritime intervention	177
3 The development of the SOSREP system	178
4 The SOSREP in action: The <i>MSC Napoli</i> incident	181
5 Concluding remarks	182
CHAPTER 8 THE DEEPWATER HORIZON DISASTER: THE REGULATORY RESPONSE IN THE UNITED KINGDOM AND EUROPE	
<i>Greg Gordon</i>	183
1 Introduction	183
2 The regulation of offshore oil and gas activities in the United Kingdom	185
2.1 The evolution of the regulatory regime	185
2.2 The UK response to <i>Deepwater Horizon</i>	190
2.3 The Energy and Climate Change Committee inquiry	193
2.4 The UK Oil Spill Prevention and Response Advisory Group (OSPRAG)	196
2.5 The Maitland Review Panel	199
3 The EU response to <i>Deepwater Horizon</i>	202
4 Conclusion	209
CHAPTER 9 SCRAPPING OF VESSELS AND OFFSHORE INSTALLATIONS: REGULATION AND LIABILITY	
<i>Professor M. N. Tsimplis</i>	211
1 Introduction	211
2 The international law on the scrapping of offshore facilities	216
3 Dumping at sea	220
4 Practical issues	224
5 The recycling of ships	227
6 The Ship Recycling Convention	228
6.1 To which structures does the SRC apply?	229

Contents

xi

6.2	Regulations for the safe and environmentally sound recycling of ships	231
6.3	Specific obligations in respect of ships and floating offshore structures	231
6.4	Authorised ship recycling facilities	234
7	Conclusions	237

CHAPTER 10 THE USE OF THE SEA FOR WIND ENERGY PROJECTS

Dr Stefan Schmitz 241

1	Introduction	241
2	Overview of offshore wind projects	244
2.1	Construction	244
2.2	Costs and off-take	245
2.3	Financing	247
3	Legal regime for offshore wind projects	248
3.1	General	248
3.2	International law	249
4	National laws	250
4.1	The United Kingdom	251
4.1.1	Leasing the land	251
4.1.2	Permitting	252
4.2	Germany	252
4.2.1	Permitting	253
5	Summary and outlook	254

CHAPTER 11 THE EMERGING INTERNATIONAL REGULATION OF CARBON STORAGE IN SUB-SEABED GEOLOGICAL FORMATIONS

Dr Susanna Much 255

1	Introduction	255
2	Introduction to CCS technology	257
2.1	Capture	258
2.2	Transportation	259
2.3	Storage	259
3	Risks related to carbon storage	261
4	The international legal framework on carbon storage in sub-seabed geological formations	262
4.1	The LOSC	262
4.1.1	Territorial sea and its seabed	263
4.1.2	The Exclusive Economic Zone, its seabed and the continental shelf	263

4.1.3	High seas and the Area	265
4.1.4	Conclusion	266
4.2	The London Convention	267
4.2.1	Scope of application	267
4.2.2	Application to carbon storage	268
4.3	The London Protocol	269
4.3.1	Scope of application	270
4.3.2	Application to carbon storage	270
4.4	The OSPAR Convention	272
4.5	EU Directive on Geological Storage of Carbon Dioxide	273
5	Conclusion	274
 CHAPTER 12 PIPELINES AND PROTECTED SEA AREAS		
	<i>Professor Alexander Proelss</i>	276
1	Introduction	276
2	International legal standards applicable to submarine pipelines and MPAs	278
2.1	Procedural standards	278
2.2	Substantive standards	280
3	Coastal state jurisdiction concerning nature conservation and offshore pipelines	283
3.1	Legal status of the EEZ	284
3.2	Scope of environmental jurisdiction of the coastal state in respect of offshore pipelines	287
3.2.1	Transit pipelines in terms of LOSC Article 79(2)	287
3.2.2	Landing pipelines in terms of Article 79(4) LOSC	290
4	Conclusion	292
 CHAPTER 13 PROTECTION OF THE UNDERWATER CULTURAL HERITAGE		
	<i>Professor Tullio Scovazzi</i>	293
1	A new concern	293
2	Different models in national legislation	293
3	The LOSC regime	296
4	The 2001 UNESCO Convention on the Protection of Underwater Cultural Heritage	300
4.1	Eliminating the undesirable effects of the law of salvage and finds	300
4.2	Regional cooperation	303
4.3	State ships and aircraft	304
5	The present uncertain situation	305

CHAPTER 14 EMERGING THREATS TO SHIPPING SECURITY: THE EVOLUTION OF LEGAL NORMS	
<i>Judge Rüdiger Wolfrum</i> 307	
1	Introduction 307
2	The traditional mechanisms against acts of violence at sea 308
2.1	Piracy 308
2.2	The suppression of other forms of violence at sea 311
3	Approaches under general international law to suppress terrorist activities at sea 313
3.1	Self-defence 313
3.2	Measures against ships under the control of terrorists taken by or on behalf of the flag state 314
3.3	Precautionary measures: control of cargo 315
4	Conclusions 317
<i>Index</i> 319	