Science and Risk Regulation in International Law

The regulation of risk is a preoccupation of contemporary global society and an increasingly important part of international law in areas ranging from environmental protection to international trade. This book examines a key aspect of international risk regulation – the way in which science and technical expertise are used in reaching decisions about how to assess and manage global risks. An interdisciplinary analysis is employed to illuminate how science has been used in international legal processes and global institutions such as the World Trade Organization. Case studies of risk regulation in international law are drawn from diverse fields including environmental treaty law, international trade law, food safety regulation and standard-setting, biosafety and chemicals regulation. The book also addresses the important question of the most appropriate balance between science and non-scientific inputs in different areas of international risk regulation.

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CAMBRIDGE
UNIVERSITY PRESS

CAMBRIDGE UNIVERSITY PRESS
Cambridge, New York, Melbourne, Madrid, Cape Town, Singapore,
São Paulo, Delhi, Dubai, Tokyo, Mexico City

Cambridge University Press
The Edinburgh Building, Cambridge CB2 8RU, UK

Published in the United States of America by Cambridge University Press,
New York

www.cambridge.org
Information on this title: www.cambridge.org/9780521768634

First published 2010

Printed in the United Kingdom at the University Press, Cambridge

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

Library of Congress Cataloguing in Publication data
Peel, Jacqueline.
Science and risk regulation in international law / Jacqueline Peel.
p. cm. – (Cambridge studies in international and comparative law)
Includes bibliographical references and index.
ISBN 978-0-521-76863-4 (hardback)
1. Risk management–Law and legislation. 2. Science and law.
3. International law. I. Title.
K487.R57P44 2010
344.04'6–dc22
2010033026

ISBN 978-0-521-76863-4 Hardback

Contents

Preface

In our modern, industrialised world science is the way we have come to know and understand risks to our health and the environment. These risks range from the potential cancer-causing properties of traces of chemical contaminants in foodstuffs, to large-scale challenges, such as reducing the effects and managing the impacts of worldwide climate change. Most such risks are seen as having a global dimension, whether because of the potential for broad-ranging effects on human and environmental systems (as in the case of climate change) or because globalised processes of trade and commerce have the capacity to disseminate widely potential risks associated with particular products (for instance, genetically modified crops). In response to these factors, requirements for risk regulation have proliferated in international law and global governance, with science and expert processes of risk assessment as their basis.

As international law has come to take on a more important role in the governance of risk, it is exercising greater influence over key aspects of risk regulation, such as the role of science in assessing and managing health and environmental risks. Science is considered by most to be a necessary component of risk regulation, especially when dealing with risks to human health and the environment that would otherwise be difficult to perceive and comprehend. However, science and expertise hold less power than in the past to legitimate the exercise of governing authority. Greater acknowledgment of uncertainties in scientific knowledge and the gradual acceptance of social scientific research illustrating the potential for a diversity of perspectives on risk issues have led to questions over whether science should be the only (or primary) resource relied upon in international risk decision-making.

These questions – that have significant ramifications for international law in the area of risk regulation, as well as for states and for their citizens affected by international risk decision-making – are the focus of this book. It explores the appropriate role for science in risk regulation undertaken at the global level. This requires striking a delicate balance between the desire for credibility and the need for international law and institutions to be perceived as a legitimate source of risk governance – something that, in turn, often depends on recognising local risk perspectives and political concerns. While the book argues that science alone is rarely sufficient as a basis for credible and legitimate risk decision-making under international law, it by no means seeks to displace the role of science entirely. Ultimately the goal of the book is to find better ways to use science, and to prevent the misuse of science, in the international law of risk regulation.

The role of science in risk regulation, and the way this is influenced by domestic legal processes, has been, and continues to be a topic of intense policy debate and the basis for a substantial scholarship that crosses the disciplines of science, social science and law. In international law the topic of science and risk regulation rose to prominence with interstate disputes in the late 1990s such as the *Hormones* case over the application of the scientific evidence and risk assessment requirements of the World Trade Organization's Sanitary and Phytosanitary Measures Agreement (WTO SPS Agreement). Such disputes generated a thriving literature, but it is only recently that scholars have begun to explore more broadly the role of science in risk regulation in a range of areas of international law. The significant level of current interest in these questions among international legal and other scholars is attested by events such as the joint American and European Societies of International Law October 2009 forum on 'Science and International Law', and the publication of major edited collections on the issue such as *Uncertain Risks Regulated* (2009)[1].

This work builds upon, and also seeks to extend, the existing literature and practice concerning science and risk regulation in international law. To do so, the book adopts an interdisciplinary approach that combines the knowledge and findings of both international law and the sciences. This has allowed a fuller survey and treatment of the ways scientific evidence, and regulatory notions of 'sound science' and

[1] Michelle Everson and Ellen Vos (eds.), *Uncertain Risks Regulated* (Abingdon: Routledge-Cavendish, 2009)

precaution, are and might be addressed in international law. The book applies these insights to a range of case studies of the use of science in international risk decision-making processes. The most substantial case study addresses the now extensive practice of risk regulatory review by WTO bodies under the SPS Agreement. However, in line with the book's ambition to examine science and risk regulation in international law more broadly, other case studies are drawn from diverse areas, including international standard-setting in the food safety area, biosafety and the regulation of genetically modified organisms, risk assessment and management of pesticides and other potentially harmful chemicals, and global assessments of the risk of climate change, that inform international negotiations on the appropriate political and legal response.

Acknowledgements

This book originally began life as my Ph.D. thesis at the University of Melbourne and accordingly I owe an enormous debt of gratitude to my thesis supervisor, Professor Anne Orford, for her diligence, insights and thoughtful comments in guiding the initial articulation of this work. In reworking the thesis into its current book form I also derived much assistance and encouragement from the feedback of my examiners, Professors Rob Howse and Mary Footer, as well as the comments of two anonymous reviewers.

Over the course of writing the book I benefited greatly from opportunities to discuss my ideas and research with many colleagues, both in Australia and overseas. I am particularly grateful to Professor Joseph Weiler and the Jean Monnet Center at New York University who hosted me as a Hauser Research Fellow in 2003–4 while I was researching the SPS case study for this book. The book's discussion of the 'democratisation' of science in international risk decision-making benefited also from feedback from Professor José Alvarez and other international law colleagues during my participation in the International Law and Democratic Theory Symposium hosted under the auspices of the American, Australian/New Zealand, Canadian and Japanese International Law Societies in June 2006.

Back in Australia, at my home law school of Melbourne University, I was very fortunate to receive research support funds from the Law School that allowed me to employ fantastic research assistants such as Michael Power. In addition, many of my colleagues provided support for, and feedback on, my work. I would particularly like to mention in this regard David Morgan, Dr Jürgen Kurtz, Professor Lee Godden and Dr Jenny Beard.

I am also immensely grateful to international colleagues who have supported my work and professional development over many years. In particular I would like to thank Professor James Crawford and Professor Philippe Sands, both of whom have been wonderful mentors since I first met them as a NYU Masters student in 2000.

In bringing this book to fruition, I would like to acknowledge the diligent work and effort of editors and staff at Cambridge University Press. They include law commissioning editor, Nienke van Schaverbeke, Richard Woodham, Lorraine Slipper and the project manager for the book, Rob Wilkinson.

Last, but certainly by no means least, I would like to thank my family and friends who have given great support during the writing of the book. The production of my thesis and this book coincided with the birth of my children Aly (in July 2007) and Will Findlay (in August 2009), to whom I would like to dedicate this work, with love.