PUBLICATIONS ON OCEAN DEVELOPMENT

THE PRECAUTIONARY PRINCIPLE IN THE LAW OF THE SEA

MODERN DECISION MAKING IN INTERNATIONAL LAW

Simon Marr

MARTINUS NIJHOFF PUBLISHERS

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by
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MARTINUS NIJHOFF PUBLISHERS
THE HAGUE/LONDON/NEW YORK

Published by:
Kluwer Law International,
P.O. Box 85889, 2508 CN The Hague, The Netherlands.
sales@kluwerlaw.com
http://www.kluwerlaw.com

A C.I.P. Catalogue record for this book is available from the Library of Congress.

Printed on acid-free paper

ISBN 90 411 2015 7

Printed in the Netherlands.

Publications on Ocean Development

Volume 39

A series of Studies on
the International, Legal, Institutional and Policy Aspects
of Ocean Development

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Preface and acknowledgements

This book is a recently revised version of my doctoral dissertation which was undertaken at the University of Hamburg, Institute for the Law of the Sea and Maritime Law, and accepted in June 2002. I have tried to state the law as it was on 1 October 2001 although the careful reader will note that in a number of aspects more recent developments have been included.

The idea of this book was born in August 1999 when the question of the status of the precautionary principle in the Law of the Sea arrived at the International Tribunal for the Law of the Sea in the *Southern Bluefin Tuna Cases*. Fortunately, I was finishing my legal training at that time at the Tribunal and was assigned the task of conducting preliminary research on this question. Subsequently, substantial parts of the research for this book were done at the United Nations Headquarters New York, Division for Ocean Affairs and the Law of the Sea, and at New York University where I enjoyed the status of a visiting scholar from May to July 2000.

When writing this book I experienced all possible states of mind: most of the time I was lucky enough to feel enthusiastic about writing this book. However, there were enough times too, when I felt frustrated, and was close to giving it all up. It was particulary during these times when I was fortunate to have had help and inspiration from a lot of different people. First of all, I am indebted to Prof. Dr. Rainer Lagoni for the encouragement and enduring support he gave me in writing this book and, finally, for making the first review on the dissertation. To this end I would also like to thank Prof. Dr. Koch for his second review of the dissertation. I am also indebted to Gabriele Göttsche-Wanli, Legal Officer at the United Nations Division for the Law of the Sea, for inspiring me with her profound knowledge in all areas of the law of the sea and for spending countless hours in discussions with me exchanging ideas on the thesis which were most valuable and contributed greatly for the development of this book. Further, I am indebted to Prof. Philippe Sands who raised my interest in international environmental law at London University (School of Oriental and Asian Studies) and supported my application as visiting scholar at New York University where I spent a most fruitful time establishing the foundation for this book. To this end I am tremendously indebted to the New York University, in particular Prof. Richard Stewart, for supporting my studies. In addition, I should also thank Dr. Ximena Hinrichs, Legal Officer at the International Tribunal for the Law of the Sea, for inspiring me to writing this book and her continuing support throughout the whole process. This book would never have been written without her. Moreover, I would like to thank Matthias Buck, Roda Verheyen, Vera Rodenhoff

and Alex Rydmark who provided me with substantial, invaluable food for thought when writing this book.

I should also thank Radu Popa, from the international law section of NYU law library, and Ellen Schaffer, from the library of the International Tribunal for the Law of the Sea who helped me tremendously in the research for this book.

Extra thanks must also go to numerous friends who never tired in their support, in particular Philipp Mainzer for making it possible for me to pursue research in New York City.

Also, I am indebted to my family and their everlasting moral and financial support. Without their help writing this book clearly would not have been possible.

Finally, I would like to thank Annebeth Rosenboom from Kluwer Law International for her interest in publishing this book. I must also say thanks to Andreas Kraemer, Director of Ecologic, Institute for International and European Environmental Policy, who generously supported the publishing process and my colleagues Katy Thiele for her enormous assistance and stamina in making this book camera-ready and Jan Altman-Schevitz for proof-reading it and improving the language. Needless to say that any remaining errors or omissions remain my full responsibility.

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Berlin, 11 October 2002

Abbreviations

AFMA	Australian Fisheries Management Authority
AJIL	American Journal of International Law
ALR	Australian Law Reports
ALARA	as low as reasonable achievable
AROA	Annual Review of Ocean Affairs
BaPs	benzo(a)pyrenes
BAT	best environmental techniques
BEP	best environmental practices
BGBl	Bundesgesetzblatt
BYIL	British Yearbook of International Law
CBD	Convention on Biological Diversity
CCAMLR	Convention for the Conservation for Antarctic Marine Living Resources
CCSBT	Convention for the Conservation of Southern Bluefin Tuna
CPPNM	The Convention on the Physical Protection of Nuclear Material
Cmnd.	Command Paper
DTI	Department of Trade and Industry
EC	European Community
ECJ	European Court of Justice
ECT	European Community Treaty
EJIL	European Journal of International Law
EEZ	Exclusive Economic Zone
EFP	Experimental Fishing Programme
EU	European Union
FAD	Fish Aggregation Device
FAO	(United Nations) Food and Agriculture Organization
GA	(United Nations) General Assembly
GPA	Global Programme of Action
GESAMP	IMO/FAO/UNESCO/WMO/ WHO/IAEA/UN/UNEP Joint Group of Experts on the Scientific Aspects of Marine Pollution
GewArch	Gewerbearchiv
GFCM	General Fisheries Commission for the Mediterranean
IAEA	International Atomic Energy Agency
IBSFC	International Convention on Fishing and Conservation of the Living Resources in the Baltic Sea and the Belts

ICCAT	International Convention for the Conservation of Atlantic Tunas
ICES	International Council
ICJ	International Court of Justice
ICLQ	International and Comparative Law Quarterly
IGAE	Intergovernmental Agreement on the Environment
IJMCL	International Journal of Marine and Coastal Law
ILA	International Law Association
ILC	International Law Commission
ILM	International Legal Materials
ILR	International Law Reports
IMDG Code	International Maritime Code for Dangerous Goods
IMO	International Maritime Organization
INF Code	Code for the Safe Carriage of Irradiated Nuclear Fuel, Plutonium and Radioactive Waste in Flasks on Board Ships
IPHC	International Pacific Halibut Commission
ITLOS	International Tribunal for the Law of the Sea
IWC	International Whaling Commission
LOS Convention	United Nations Convention on the Law of the Sea, 1982
MARPOL	International Convention for the Prevention of Pollution from Ships, 1973
MEPC	(IMO) Marine Environmental Protection Committee
MOX	mix oxide form
MPA	Marine Protected Area
MSC	(IMO) Marine Scientific Committee
MSFCMA	Magnuson-Stevens Fishery Conservation and Management Act
MSY	maximum sustainable yield
NAFO	North Atlantic Fisheries Organization
NAFTA	North American Free Trade Agreement
NASCO	Convention for the Conservation for Salmon in the North Atlantic Ocean
NCI	Nuclear Control Institute
NSG	National Standard Guidelines
NRC	National Research Committee (United States)
NVwZ	Neue Zeitschrift für Verwaltungsrecht
ODIL	Ocean Development and International Law
OJEC	Official Journal of the European Communities
OMP	Operational Management Procedure
PAHs	polycyclic aromatic hydrocarbons
PCBs	polychlorinated biphenyls
PCIJ	Permanent Court of International Justice
POPs	persistent organic pollutants

POPs Convention	Stockholm Convention on Persistent Organic Pollutants
RECIEL	Review of European Community & International Environmental Law
RCACI	Receuil des cours de l' Académie de droit international (The Hague)
Rep.	Reports
Res.	Resolution
RFB	Regional Fisheries Body
SBT	Southern Bluefin Tuna
SOLAS	Safety of Life at Sea (Convention)
SPNFZT	South Pacific Nuclear Free Zone Treaty
SPS Agreement	WTO Agreement on the Application of Sanitary and Phytosanitary Measures (SPS Agreement)
SPS	sanitary and phytosanitary
TAC	total allowable catch
UN	United Nations
UNEP	United Nations Environment Programme
UNCED	United Nations Conference on Environment and Development (Earth Summit 1992)
UNTS	United Nations Treaty Services
VCLT	Vienna Convention on the Law of the Treaties, 1969
WECAFC	Western Central Atlantic Fishery Commission
WTO	World Trade Organization
WWF	World Wildlife Fund for Nature
YIEL	Yearbook of International Environmental Law
YILC	Yearbook of the International Law Commission

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Introduction

"Whatever we think of the value of a recognized rule - whether we approve or condemn it, whether we want to retain, abolish, or replace it - we must first of all know whether it is really a recognized rule of law at all, and what are its commands."[1]

Only recently, the precautionary principle has begun to play a remarkable role in international litigation. On 27 August 1999 the International Tribunal for the Law of the Sea,[2] in a dispute between Australia, New Zealand and Japan requested the parties to refrain immediately from conducting an experimental fishing programme (EFP) of Southern Bluefin Tuna (SBT), which Japan had undertaken unilaterally.[3] Interestingly, the Tribunal adopted this Order in the face of scientific uncertainties of the parental biomass within the stock of SBT. Environmental action in the face of scientific uncertainties, however, has been the litmus test for the precautionary principle for the last decade. Thus, the decision prompted a number of commentators to suspect that the Tribunal, while not expressly referring to the precautionary principle, had nonetheless applied it.[4]

Besides its application to the Southern Bluefin Tuna Cases, however, the precautionary principle applies to almost all areas of human activity that might

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1 Lassa Oppenheim, "The Science of International Law: Its Task and Method", (1908) 2 *AJIL*, pp. 313-356, pp. 314-315.

2 [hereinafter referred to as: Tribunal].

3 The *Southern Bluefin Tuna Cases*, New Zealand, Australia v. Japan (1999) International Tribunal for the Law of the Sea, see *infra* Chapter 7.5; (1999) 38 *ILM*, pp. 1624-1656; www.itlos.org/start2_en.html (visited 06.09.2002). See also, Barbara Kwiatkowska, "The Southern Bluefin Tuna Cases", (2000) 15 *IJMCL*, pp. 1-36;

4 Simon Marr, "The Southern Bluefin Tuna Cases: The Precautionary Approach and Conservation and Management of Fish Resources", (2000) 11 *European Journal of International Law*, pp. 815-832; Adriana Fabra, "The LOSC and the Implementation of the Precautionary Principle", in Brunnée and Hey (eds) 10 *Yearbook of International Environmental Law 1999* (Oxford University Press, 2000) pp. 15-24, p. 17; David Freestone, "Caution or Precaution 'A Rose By Any Other Name'", *ibid.*, pp. 25-32, p. 32; Orrego Vicuña, "From the 1983 Bering Sea Fur – Seals Case or the 1999 Southern Bluefin Tuna Cases: A Century of Efforts at Conservation of Living Resources of the High Seas", *ibid.*, pp. 30-47, p. 44; Rüdiger Wolfrum, "Precautionary Principle", in Jean Pierre Beurier *et al* (eds), *New Technologies and Law of the Marine Environment* (Kluwer Law International, 1999) 55 *International Environmental Law and Policy Series*, pp. 203-213, p. 211.

have an impact on health and the environment: states agreed upon a world wide reduction of greenhouse gases, for instance, on the grounds of this principle.[5] Furthermore, imports of genetically modified maize[6] or hormone treated beef[7] have already been banned by states invoking it. In relation to the Law of the Sea as well, there have been various calls via the precautionary principle to restrict activities relating to fisheries, marine pollution and transports of radioactive and hazardous substances.[8]

Against this background various questions still arise which make further examination of the precautionary principle necessary. Many aspects of the principle have yet to be clarified sufficiently, such as its status as a rule of customary international law including its scope, addressee, triggering threshold, precautionary action measures, and the principle's eventual limits. It would seem as if vagueness and ambiguity preclude more detailed evaluation of these questions.[9]

Thus, the purpose of this study is to examine the present state of affairs regarding the implementation of the precautionary principle in the law of the sea in order to find a common understanding of it and to extract evidence of its acceptance as part of customary international law.

The scope of the following investigation is limited by its primary focus upon the precautionary principle in different sectors in the law of the sea, i.e. pollution of the marine environment, conservation and management of marine living resources, and transboundary transports of radioactive and hazardous wastes. To this end it is important to scrutinize the precautionary principle on a sector-by-sector basis,[10] to find out whether it has been implemented differently in

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5 Sebastian Oberthür and Hermann Ott, *The Kyoto Protocol* (Springer, 1999) p. 11.

6 *Association Greenpeace France and others v. Ministère de l' Agriculture et de la Peche and others*, European Court of Justice, Case C-6/99 (21 March 2000); for further reference, see Wybe Douma, "Precautionary principle in the EU", (1999) 9 *RECIEL*, pp. 132-143, p. 139.

7 *EC Measures Concerning Meat and Meat Products (Hormones)*, Report of the WTO Appellate Body, 16 January 1998, AB-1997-4; WT/DS26/AB/R, WT/DS48/AB/R, available at: www.worldtradelaw.net/reports/wtoab/ec-hormones(ab).pdf (visited 06.09.2002).

8 See *infra* Chapters 4-8.

9 Lothar Gündling, "The Status of the Principle of Precautionary Action", (1991) *International Journal of Estuarine and Coastal Law*, pp. 23-30, pp. 27-28.

10 David Freestone, "Implementing Precaution Cautiously", in Ellen Hey (ed.), *Developments in International Fisheries Law* (Kluwer Law International, 1999) pp. 287-325, p. 299; a similar approach is taken by David VanderZwaag, who tries to get a conceptual grip on the precautionary principle as it relates to marine environmental protection, see David VanderZwaag, "The Precautionary Principle and Marine Environmental Protection", (2002) 33 *Ocean Development & International Law*, pp. 165-189; also Elisabeth Fisher argues along the same lines, when she highlights the

various sectors. This thought is based on the assumption that in some sectors of environmental law the effects of human activity on the environment and health are sometimes easier to predict than in others. Also the scope and the intensity of environmental precautionary action could be completely divergent in different sectors. Thus, the implications of the precautionary principle could vary from sector to sector.[11] For example in modern risk assessment there is a separate threshold for the relatively well known effects of the building of a dam upon the flora and fauna as compared to the relatively unresolved effects of drift net or beam trawler fishing upon the living organisms and the food chain in the oceans. The same holds true in the case of the incineration of toxic substances, which have unpredictable effects on the marine environment depending on amount, natural circumstances and possible interactions with other toxic substances. The intensity of the precautionary action can thus vary from the building of fish ladders to the establishment of certain total allowable catch quotas of fish to a complete ban on the most hazardous substances.

As environmental protection is difficult to restrict to specific sectors, however, in some cases the scope has been extended to areas not directly linked to the marine environment, e.g. air emissions of hazardous substances. This is exemplified in Chapter 4, which draws upon national court decisions dealing in most cases with the licensing requirements of the relative authorities and which have no direct bearing on marine pollution. This examination takes them into account since the overall sector in which the courts decided was that of environmental protection. Hence they are secondarily related to the marine environment and could serve as an indicator for the judiciability of the precautionary principle in national jurisprudence.

Furthermore, this investigation is not meant to be exhaustive, but rather focuses only on the most pertinent international or national implementations of the precautionary principle in the relative sectors.

Chapter 1 sets out the history and some basic considerations of the precautionary principle. Chapter 2 then identifies the key to the precautionary principle as being science and its implications, Chapter 3 formulates limits to the precautionary principle. The subsequent chapters then turn to the state practice in the sectors pollution of the marine environment (Chapter 4), marine biodiversity

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necessity to find a common understanding of the precautionary principle and notes that "there is clearly a need to delineate and study more carefully the contexts in which the precautionary principle is operating", see Elizabeth Fisher, "Precaution, Precaution Everywhere: Developing a 'Common Understanding' of the Precautionary Principle in the European Community", (2002) 9 *Maastricht Journal of European and Comparative Law*, pp. 7-28, p. 26.

[11] See in relation to German environmental law, Fritz Ossenbühl, "Vorsorge als Rechtsprinzip im Gesundheits-, Arbeits- und Umweltschutz", (1986) 3 *NVwZ*, pp. 161-171, p. 164.

(Chapter 5), dumping of radioactive and hazardous substances and incineration (Chapter 6), conservation and management of marine living resources (Chapter 7) and transboundary movements of radioactive and hazardous substances (Chapter 8). In these chapters, the implementations of the precautionary principle in international agreements, national legislation and its application in litigation as far as available will be scrutinized. Chapter 9 sets out the prerequisites for state practice as accepted custom, which would also be the applied standard for ultimately evaluating whether the precautionary principle has evolved into a rule of customary law. Chapter 10, the final chapter of the study, will draw some preliminary conclusions.

1 History and Overview of the Precautionary Principle

"The constitution of every society is unique. The constitution of all societies have in common their operating principles as systems".[12]

The evolution of the precautionary principle in the international arena actually began in the early 1980s but traces its origins to domestic legal systems, where it has been considered as a legal principle since the 1970s.[13] There are also a number of international agreements providing for precautionary mechanisms that go back as far as 1952, such as The International Convention of the High Seas Fisheries of the North Pacific, 1952, or The Convention on International Trade in Endangered Species of Wild Flora and Fauna, 1973 (CITES).

Concerning the marine environment, the precautionary principle attracted considerable attention at the first North Sea Conference in 1984.[14] Soon thereafter it was incorporated into a number of policy declarations[15] and by the end of the 1980s it also found its way into binding agreements.[16] More than anything, it provides guidance for environmental decision making, in situations when policy makers face scientific uncertainty. It has been incorporated in a vast number of international policy documents[17] as well as international agreements,[18] a number

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12 Philip Allot, *Eunomia – New Order for a New World* (Oxford University Press, 1990) p. 167.

13 Most notably the precautionary principle (*Vorsorgeprinzip)* has been featured in West Germany's and Sweden's legal system.

14 Peter Ehlers, "The History of the International North Sea Conferences", in David Freestone and Ton IJlstra, (eds), *The North Sea: Basic Legal Documents on Regional Environmental Co-operation* (Kluwer Law International, 1991), pp. 3-14, p. 5.

15 UNEP, Decision 15/27 of the Fifteenth Council, 25 May 1989; 1976 Barcelona Convention for the Protection of the Mediterranean Sea against Pollution, Article 6; Sixth Meeting of the Contracting Parties, October 1989; Nordic Council's Conference on Pollution of the Seas, October 1989.

16 For example: Decision 89/1 of 14 June 1989, Oslo Commission; reproduced in Freestone and IJlstra (eds), *supra* note 14, p. 119.

17 Art. VII, XV(ii), XVI(1) of the 1987 Ministerial Declaration of the Second North Sea Conference; Principle 15 of the 1992 Rio Declaration; Paragraph 17.21 of Agenda 21; United Nations General Assembly resolutions 44/225 of 22 December 1989 and 46/215 of 20 December 1991; Ministerial Declaration on the Protection of the Black Sea (1993); Art. 7.5 FAO Code of Conduct for Responsible Fisheries (1995); Sintra