between the cargo-owner and the shipowner. It discusses in great detail the origins and content of the 1969 Civil Liability Convention and the 1971 Fund Convention, as well as the industry compensation schemes, TOVALOP and CRISTAL. A separate chapter deals with the revisions of these instruments up to the 1992 amendments to the 1969 and 1971 Conventions.

The second part deals with the difficulties in the implementation of the international instruments. In particular, the point is made that the United States, the world's greatest user of tankers for its export and import trade, is not a party to the above Conventions and in 1990 promulgated its own Oil Pollution Act, which adopts a different system of liability and compensation. The author analyses in great depth the legislative history of this Act, which she considers imposes an excessive burden on shipowners and cargo-owners.

Having dealt with the question of who pays, the author then turns to the question of payment for what. She conducts a comparative study of the laws applicable in this respect in France, England and the United States, in particular the rules relating to claims by individuals for direct and indirect losses (damnum emergens and lucrum cessans). She then discusses the difficult issue of compensation for damage to the environment in general, which she sees better developed in some jurisdictions than in others. Finally, Dr Wu advances the futuristic suggestion that, as the carriage of oil benefits mankind in general, mankind, through inter-State agreement, should establish a compensation fund to complement those provided by shipowners and cargo-owners.

This is a fine piece of research, written in the best traditions of French analytical style. It provides in particular an original insight into the workings of the International Fund for Compensation for Oil Pollution Damage. Dr Wu unreservedly deserves her prize.

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Ocean Governance: Sustainable Development of the Seas. Edited by PETER BAUTISTA PAYOYO. [Tokyo/New York/Paris: United Nations University Press. 1994. xlv + 369 pp. ISBN 92-808-08477. US\$50 (pbk)]

THE present work is an edited report of the Pacem in Maribus XIX Conference held in Lisbon in 1991, which adopted as its theme "Ocean Governance: National, Regional, Global Institutional Mechanisms for Sustainable Development in the Oceans". Following the Conference theme, this book is divided into four parts. Part 1 looks at the existing framework for ocean governance, whilst Parts 2, 3 and 4 look at the topic on a national, regional and global level respectively. Many of the contributions are essentially non-legal, and therefore may be of more limited interest to international lawyers, particularly when economic analyses are made (as e.g. in chapter 6: "Environmental Accounting"!). Among those of most interest to the lawyer is, in Part 1, a piece by C. W. Pinto on "Sustainable Development and Institutional Implications" in the LOSC. He concludes (as do others) that "fragmentation" of "institutional responsibilities" under the LOSC makes it necessary to establish further institutional mechanisms within the UN system (p.23).

Also of legal interest (in Part 3: "Regional Level") is F. Vicuna's short piece "Joint Management Zones" (chapter 10), which makes the valid point that although joint development zones have been "mainly devised in relation to non-living resources, there is no reason to prevent their utilisation with respect to other uses of the sea" (p.179). (Curiously, though, his bibliography makes no reference to the BIICL's own expansive study of such zones in 1989/90)

Several other more specialist contributions will interest the maritime lawyer; for example, in Part 2 the chapter by S. Vallejo—"New Structures for Decision-Making in Integrated Ocean Policy"—which reviews the major intra-State institutional problems and points out that not only are "ocean affairs" not of central concern in most countries, but also "ocean-related matters may easily fall within 15 to 25 sectoral divisions" of a State, with consequent

fragmentation of responsibility and duplication of effort (p.73), and without any "overall ocean policy framework" (p.74). (This may be particularly so in the case of developing States—Tanzania is one such example quoted in the "Opening Address" (p.xiiii).) She goes on to analyse several coastal management systems (though the list on p.76 could be added to—for example, to include Ireland, which since 1992 has had a Marine Institute). She wisely concludes that one of the most effective forms of coastal management is an inter-ministerial/agency council set up at the highest political level (p.89), though there are "no fixed institutional models" (p.93). Another obvious ideal might be specific "Ministries of the Sea"—here the list of existing examples given (e.g., at p.337) is incomplete (for example, it fails to note that Ireland has a Ministry for the Marine!).

This chapter is followed (chapter 7) by case studies on marine governance in India and Japan. This concentration on Indian policy is also reflected later—in chapter 13—where the Indian Ocean is chosen as one of the two regional case studies—as it allegedly has the "only existing comprehensive regional institution in ocean affairs" (p.39), namely IOMAC.

Running through the book is the expressed need for a "holistic approach" to marine issues (p.5), reflected in the truism recognised in the preamble to the LOSC itself, that the "problems of ocean space are closely interrelated and need to be considered as a whole". Such problems are inseparable from the land and the air (pp.30, 247). The existing international "sectoral approach" to ocean governance is seen to be further reflected nationally and regionally (p.332). In the Preface Elisabeth Borgese stresses that Chapter 17 of Agenda 21 of the Rio Conference—dealing with sustainable ocean development—is the "link between the UNCED and UNCLOS processes" and cannot be implemented without the Law of the Sea Convention, which "provides the necessary jurisdictional framework" (p.xi). However, the Convention itself has only provisions (in Part XI) to achieve sustainable development in respect of deep seabed mining (p.16).

The question remains how the "holistic" aim is to be achieved, especially globally. Jan van Ettinger et al., in chapter 14 ("Ocean Governance and the Global Picture"), see the common heritage concept as a possible "foundational concept" here (p.249) which may have a wider use than the deep seabed (p.251); for example, for fisheries (p.260); but what precisely is to be the global institutional set-up which avoids the obvious danger of "duplication and overlaps" (p.280)? Here there seems to be general (though not unanimous) agreement among the contributors that existing specialist maritime organisations such as, e.g., IMO cannot be expected to take on all the necessary ocean governance functions. (As is pointed out, the LOSC Convention "already assigns important roles to organisations within the UN family" (p.8), even if the reference is only "by necessary implication" (p.9)—a point reiterated in chapter 15 (pp.278-280).) Suggestions, then, on this vital global query tend to home in on some new co-ordinating forum (p.21), possibly within the UN General Assembly framework (p.31)—an idea also supported by S. N. Nandan (at p.30: a "new global forum")—or outside it: formation of a special "UN Ocean Assembly" (p.274). This latter idea is taken further by A. Yankov and M. Ruivo in chapter 19, who point to Peru's proposal in 1978 that an International Commission on the Law of the Sea should be set up (p.333) and specify possible powers and functions of such an Assembly (pp.341-342).

Useful as this book will be, it is a pity that the individual contributions were not updated at publication to reflect the entry into force of the LOSC in 1994—an event which, for example, makes F. Njenga's chapter 3 ("The Significance and Cost of Ratification of the LOSC 1982") largely redundant. Inevitably also, as in any collection of conference papers, there is much repetition. The basic message, though, is clear and correct: a more comprehensive approach is needed towards the "governance" of the oceans.

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