

Contents

MANAGING EDITOR'S COMMENTS (<i>Lonnie Edge</i>)	3
ARTICLES	
A South China Sea Regional Seas Convention: Transcending Soft Law and State Goodwill in Marine Environmental Governance? (<i>Alexis Ian P. Dela Cruz</i>)	5
The <i>Timor Sea Conciliation</i> and Lessons for Northeast Asia in Resolving Maritime Boundary Disputes (<i>Natalie Klein</i>)	30
Crimes Within Crimes in Somalia: Double-Dealing Pirates, Fraudulent Negotiators, Duplicitous Intermediaries and Treacherous Illegal Fishers (<i>Awet Tewelde Weldemichael</i>)	51
An Overview of Arctic Legal Regime Regarding the Protection of the Marine Environment and Some Suggestions (<i>Ekrem Korkut and Lara B. Fowler</i>)	64
Legal Approaches to Dry Cargo Liquefaction: An Arctic Perspective on a Global Problem (<i>Stefan Kirchner</i>)	85
Call for Papers and Style Guide	96

Managing Editor's Comments

Dear *JTMS* Readers,

We are pleased to present this issue of *JTMS* to round out 2018 and kick off 2019. This past year has seen an escalation of tensions between the U.S. and China over trade which is sure to spill over into other areas of tensions such as the East and South China Seas. In addition, the issues of piracy and maritime security continue to be hot topics. Finally, this year has also highlighted environmental issues such as loss of fish stocks, warming seas and species' extinction. This issue of *JTMS* has its finger on the pulse of all of those important concerns.

First, Alexis Ian P. Dela Cruz argues that the absence of a regional seas convention (RSC) in the South China Sea, one of the world's most critical marine environments, is alarming. Presently, a United Nations body coordinates East Asian marine environmental "policy" on the basis of participating states' goodwill. His contribution addresses this regional legal gap by examining RSCs elsewhere to understand whether state practice on marine environmental protection now includes the duty to conclude RSCs.

Second, Natalie Klein examines the implications of the *Timor Sea Conciliation* for other maritime boundary disputes. Her offering provides original perspectives on conciliation under the UN Convention on the Law of the Sea for the settlement of maritime boundary disputes. In addition, Klein brings up new factors to consider regarding agreement on the delimitation of Korea's maritime boundaries with China and Japan.

Third, Awet Tewelde Weldemichael discusses how the oft-romanticized view of the Indian Ocean region glosses over the physical and systemic violence that dots its history. He illustrates this point through a broad analysis of the crimes of illegal fishing and maritime piracy off the coast of Somalia, and specific examination of the tragic case of three Thai fishing boats that Somali pirates captured in mid-April 2010.

Fourth, in the first of two articles dealing with the Arctic, Ekrem Korkut and Lara B. Fowler's article considers whether international law and the Law of the Sea have sufficient rules to protect the Arctic marine environment, and if so, to what extent those protections apply. There are many issues in the Arctic Ocean including outer continental shelf claims, passage rights through the Arctic Straits, protection of marine biodiversity, protection of the marine environment, and military activities. In this research, the authors examine solely the issue of the protection of the Arctic marine environment and the polar code.

Finally, Stefan Kirchner discusses the serious threat liquefaction of dry cargoes poses threat to maritime safety. As this is a frequent cause of loss of life at sea, this text aims at raising awareness of the utility of existing international law norms to contribute to disaster risk reduction (DRR) at sea in this context. He argues that awareness of Arctic conditions and risks can help increase awareness of specific Arctic risks among crew members. There are not specific DCL-related rules in the Polar Code but learning about Arctic-specific risks can complement existing rules, such as those of the IMSBC Code, to enhance seafarer safety.

As always, we could not do what we do without our editorial board, our authors, our peer reviewers and you, our readers. I would like to thank all those involved for your continued support and wish you a safe and happy start to the New Year. We look forward to bringing you even more great research and the ongoing improvement of *JTMS*.

Best Wishes for 2019,
Lonnie Edge
Co-Managing Editor

A South China Sea Regional Seas Convention: Transcending Soft Law and State Goodwill in Marine Environmental Governance?

Alexis Ian P. Dela Cruz

Structured Abstract

Article Type: Research Paper

Purpose—The absence of a regional seas convention (RSC) in the South China Sea is alarming for one of the world’s most critical marine environments. Presently, a United Nations body coordinates East Asian marine environmental “policy” on the basis of participating states’ goodwill. This contribution addresses this regional legal gap by examining RSCs elsewhere to understand whether state practice on marine environmental protection now includes the duty to conclude RSCs.

Design, Methodology, Approach—Using a comparative legal approach, the author purposely selected the Mediterranean and Caribbean regional seas programs (RSPs) to draw out practices that may be useful to marine environmental governance in the South China Sea.

Findings—The comparison confirms the author’s hypothesis that the duty to protect the marine environment now includes a duty to conclude RSCs for the governance of the world’s regional seas.

Practical Implications—This contribution explains that a model of marine environmental governance based purely on state goodwill endangers the South China Sea over the long term.

Office of the Solicitor General, 134 Amorsolo Street, Legaspi Village, Makati City, Philippines 1229; email: ian.p.delacruz@gmail.com; Tel: (63) 2 817 9836



Journal of Territorial and Maritime Studies / Volume 6, Number 1 / Winter/Spring 2019 / pp. 5–29 /
ISSN 2288-6834 (Print) / © 2018 Yonsei University

Originality, Value—This contribution examines the exceptionalism of the East Asian RSP from the general trend towards the formalization of RSP legal frameworks elsewhere.

Keywords: marine environmental governance,
regional seas convention

Table of Acronyms

ASEAN	Association of Southeast Asian Nations
CBD	Convention on Biological Diversity
CEP	Caribbean Environment Programme
CIESM	International Committee for the Scientific Exploration of the Mediterranean
COBSEA	Coordinating Body on the Seas of East Asia
EAS	East Asian Seas
EEZ	Exclusive economic zone
GEF	Global Environmental Facility
GPA	Global Programme of Action for the Protection of the Marine Environment from Land-Based Activities
ICJ	International Court of Justice
LBS	Land-based sources of pollution
LME	Large marine ecosystem
LOSC	Law of the Sea Convention
MAP	Mediterranean Action Plan
NSD	New Strategic Development for COBSEA
PEMSEA	Partnerships for the Management of the Seas of East Asia
ROK	Republic of Korea
RSC	Regional Seas Convention
RSP	Regional Seas Programme
SIDS	Small Island Developing States
SPAW	Specially Protected Areas and Wildlife
UN	United Nations Organization
UNCED	UN Conference on Environment and Development
UNDP	UN Development Programme
UNEP	UN Environment Programme
U.S.	United States of America
VCLT	Vienna Convention on the Law of Treaties
WCR	Wider Caribbean Region

Introduction: Treaty-Making Beyond the Numbers

Fourteen of the eighteen regional seas programs (RSPs) administered or connected with the United Nations Environment Programme (UNEP) are each governed by a legally-binding regional seas convention (RSC).¹ Running by this figure, one might immediately assume that RSCs are now standard treaties implementing duties of marine environmental protection and preservation under the Law of the Sea Convention (LOSC),² which enjoys almost universal ratification. Conversely, the figure makes the four³ non-RSC RSPs seem like statistical oddities, and this is what this contribution seeks to invite attention to. Specifically, it examines one of these oddities—the South China Sea⁴—as the principal body of water in the China–Southeast Asia corridor. The purpose is to understand whether the choice to remain a non-RSC RSP is still consistent with the legal duty to protect and preserve the marine environment under the LOSC. To rephrase, do RSC hold-outs still reflect sound state practice on marine environmental protection?

Within the UNEP Regional Seas framework, the South China Sea falls under the East Asian Seas (EAS) region which “promotes compliance with existing environmental treaties and is based on member goodwill.”⁵ With the region’s soft and informal approach⁶ to compliance, marine environmental governance becomes subordinate to changes in EAS states’ attitudes, national priorities, and imbalances in regional power relations. This is arguably not the intended outcome of Article 197⁷ of the LOSC, imposing upon states a general duty to make or elaborate international rules, standards, and practices for marine environmental governance, albeit not expressly through an RSC. In this regard, UNEP Regional Seas has been recognized for its crucial role in the implementation of the wider purposes of the LOSC.⁸

This Article argues that a goodwill-based approach to compliance with marine environmental obligations over the South China Sea is now inconsistent with an evolutive reading of Article 197 of the LOSC. *Evolutive* refers to a mode of treaty interpretation which gives a term a meaning that changes over time.⁹ Evolutive treaty interpretation finds basis in Articles 31(1)¹⁰ and 31(3)(b)¹¹ of the Vienna Convention on the Law of Treaties (VCLT).¹² To contextualize this argument, this Article examines the Mediterranean and Caribbean Seas as models of RSC-governed RSPs.

This Article contains five sections, including this Introduction. The second section gives a brief background of the UNEP Regional Seas Programme, focusing on the distinctions between RSC- and non-RSC-governed RSPs to broadly assess the value of treaties as a modality of governing the world’s seas. The third section is a comparative case study of the East Asian, Caribbean, and Mediterranean RSPs. The latter two, which are RSC-governed RSPs, were selected to draw out their promising practices which may be useful to marine environmental governance in the South China Sea. The fourth section puts forward broad proposals on the shape a prospective South China Sea RSC might take. This Article then concludes in the fifth sec-

tion with the dangers a state goodwill-based approach to marine environmental governance poses to the South China Sea.

Regional Seas: A Game of Jargon?

This section sifts through the terms employed in marine environmental governance to understand whether the distinctions arising from the choice between an RSC or a soft and informal action plan are only terminological or carry substantive implications on duties concerning the marine environment. The overarching context of this inquiry is Article 197 of the LOSC, which broadly establishes a duty among states to cooperate internationally or regionally “in formulating and elaborating international rules, standards, and recommended practices and procedures ... for the protection of the marine environment, taking into account characteristic regional features.” This section begins with a brief account of the development of the UNEP Regional Seas Programme.

The Programme was inaugurated in 1974 following the 1972 UN Conference on the Human Environment in Stockholm, Sweden.¹³ The Stockholm Declaration adopted in that Conference influenced the codification of the international duty to protect and preserve the marine environment in the LOSC.¹⁴ The Programme was born during a period of heightened international concern over marine pollution: the London Dumping Convention¹⁵ was adopted in 1972 to address the deliberate disposal of wastes at sea. That treaty proved a useful beginning point to address the steady decline of the world’s marine environments. Two years after the London Convention, the birth of the Programme rekindled enthusiasm for collaborative efforts to address marine environmental degradation, with a global high-water mark eventually reached in 1982 with the conclusion of the LOSC, particularly its Part XII titled “Protection and Preservation of the Marine Environment.” In the following decades, RSCs were adopted, from the 1976 Barcelona Convention for the Mediterranean Sea to the 2002 Antigua Convention¹⁶ for the North-East Pacific as the most recent possible addition.

The Programme was founded to promote a “shared seas” approach to addressing coastal and marine environmental degradation.¹⁷ The underlying premise of this approach to marine governance is that countries surrounding a sea share common interests in the protection of its marine environment.¹⁸ Operationally, the Programme serves as a global clearinghouse of marine environmental information and policy, as well as the principal implementing body of some regional seas action plans. It is also responsible for performing UNEP responsibilities to meet Agenda 21, Millennium Development Goals, and World Summit on Sustainable Development targets.¹⁹ Three principal factors prompted the UNEP Governing Council’s decision to adopt a regional approach to marine pollution and marine and coastal resources management:

First was the continuing evidence of the further serious qualitative deterioration of semi-landlocked bays, gulfs and seas marginal to continents. Second was the real and perceived successes of the Helsinki Convention on the Baltic Sea—the first regional marine treaty to cover pollution from several distinct sources. The third was the realization that insufficient regional cooperation amongst governments was probably the single most important impediment to the implementation of effective management plans in such areas as the Mediterranean, Caribbean, Persian Gulf, and elsewhere.²⁰

There are currently 18 RSPs²¹ covering various regional seas with the participation of 140 states.²² Among these, five²³ are directly administered by the UNEP.²⁴ Four of these RSPs²⁵ are classified as independent in the sense that they have not been established under UNEP auspices. The independent RSPs, however, “share experiences and exchange policy advice and support to the [emerging] RSPs” and thus form part of the Regional Seas family.²⁶ All RSPs have action plans adopted by member governments to outline “the strategy and substance of the [RSP], based on the region’s particular environmental challenges as well as its socio-economic and political situation.”²⁷ Typically, these action plans contain chapters on Environmental Assessment, Environmental Management, Environmental Legislation, Institutional Arrangements, and Financial Arrangements.²⁸ The section on environmental legislation usually provides for the basic elements of the framework regional convention and supporting technical protocols to be adopted separately and ratified individually by the contracting states.²⁹

As mentioned above, 14 of the RSPs are covered by legally-binding RSCs that “express the commitment and political will of governments to tackle their common environmental issues through joint coordinated activities.”³⁰ The development of RSCs is assumed to be the culmination of the UNEP Regional Seas Programme; once adopted, they become the principal legal instrument governing a broad spectrum of issues like coastal habitats and fishery management practices.³¹

Action plans and RSCs are generally supplementary to existing multilateral environmental programs and initiatives and are intended to create horizontal ties among RSPs and strengthen cooperation with international organizations.³² Both are recognized regional platforms for implementing the principles of sustainable development, with emphasis on land-based sources of marine pollution, ship-generated marine pollution and oil spill preparedness, increased urbanization and coastal development, conservation and management of marine and coastal ecosystems, and marine environmental monitoring, reporting and assessment.³³

Existing action plans and RSCs draw significantly from the Global Programme of Action for the Protection of the Marine Environment from Land-Based Activities (GPA)³⁴ adopted in 1995 in Washington, D.C. The Washington GPA urges states to implement discrete national marine environment strategies or programs of action through the “governing bodies of the regional or sub regional agreements, conventions or arrangements as appropriate.”³⁵ While not a categorical nod towards RSCs, the Washington GPA nonetheless encourages states to integrate regional programs of action and relevant regionally-applicable legal agreements.³⁶ This raises the fol-

lowing questions: (1) What constitutes “legal agreements” in the UN Regional Seas context?; and (2) Why would some states choose to implement their RSPs with or without an RSC?

On the first question, the multiple sources of obligations³⁷ under international law must be considered. The VCLT defines a “treaty” as “an international agreement concluded between States in written form and governed by international law, whether embodied in a single instrument or in two or more related instruments and *whatever its particular designation*.”³⁸ Hence, the International Court of Justice (ICJ) once determined that even an exchange of letters between states constitutes an international legally-binding agreement creating rights and obligations.³⁹ The same reasoning was upheld in a case involving uninterrupted international toleration of one state’s otherwise unilateral acts.⁴⁰ Arguably, regional seas action plans may be considered “formal binding agreements as they are adopted at the highest level of State representation at Diplomatic Conferences.”⁴¹ Notionally, therefore, the form of an international agreement bears little significance in binding states to certain commitments. But despite the broad definition of “legal agreement,” a treaty or convention most explicitly signifies the consent of the ratifying parties to be bound by its terms.

The second question arguably relates to the enforcement of the commitments made in those agreements. For example, when the LOSC was concluded, no one questioned the mandatory tone of the duties of marine pollution regulation. Some, however, expressed concerns about the “insidious uncertainty” of the language of the LOSC, leaving open significant spaces for discretion and “the creative function of state practice” in developing the content and limitations of marine pollution obligations.⁴² In marine biological diversity conservation, for instance, the paucity of state practice means that customary international law has developed only a few rules in this field.⁴³ Marine environmental policies remain subordinate to national economic or developmental concerns. Some argue that even with procedural norms of marine environment protection and preservation (such as cooperation and monitoring and reporting), a balance must be struck between national rights (such as permanent sovereignty over natural resources) and obligations within and beyond the state.⁴⁴ The choice whether or not to accede to RSCs may turn upon concerns over how ratifying them might impact current state practice and varying degrees of interest in the issues to be governed by RSCs.⁴⁵ For example, the United States’ (U.S.) refusal to ratify the LOSC is primarily due to concerns, unfounded or otherwise, that it may be ceding critical aspects of its sovereignty:

Contemporary [LOSC] criticisms are largely rooted in a [cautiousness] of U.S. participation in normative international governance entities on a relatively egalitarian footing *vis-à-vis* other states.⁴⁶

But asking whether states give up certain aspects of sovereignty when they bind themselves through treaties ignores the fact that treaties do reflect certain self-serving state interests.⁴⁷ An RSC is certainly an articulation of the interests and priorities of a group of states in marine environmental governance.

Moreover, with or without an RSC, RSPs are all coordinated through a secretariat or a regional coordinating body.⁴⁸ This means that while duties under the LOSC to protect and preserve the marine environment are addressed primarily to states, RSP secretariats play a crucial role in the performance of those obligations. This is especially true in the case of the Secretariat of the Helsinki Commission, which supports Contracting States in implementing the 1992 Convention on the Protection of the Marine Environment of the Baltic Sea Area (Helsinki Convention) in addition to administrative and diplomatic functions.⁴⁹

But other RSPs evolved differently. In the EAS region, the Coordinating Body on the Seas of East Asia (COBSEA) Regional Coordinating Unit is envisaged to function both as a coordinating secretariat and program and financial manager.⁵⁰ In practice, however, participating states generally dislike the prospect of an empowered secretariat because of vast differences in political, socioeconomic, cultural, and historical circumstances.⁵¹ These circumstances significantly inform the region's preference for non-binding mechanisms of marine environmental governance.

The relative levels of economic development of neighboring states also figure significantly in the adoption of an RSC. States with advanced economies are more willing to bind themselves legally to make financial contributions to support a centralized secretariat or coordinating body. In the EAS, which spans a diversity of national economies, soft and informal marine environment governance mechanisms are based on partnership, voluntary participation and financial contribution rather than strict compliance with treaty commitments.⁵² On the other hand, RSC-governed RSPs are not necessarily immune from the consequences of varying levels of national economic development. Political and economic differences across the Mediterranean impede technical and scientific integration in marine environment protection and preservation among Barcelona Convention countries despite a well-developed legal-institutional framework.⁵³

But because of the voluntary, non-compulsory, and non-RSC framework for EAS governance, participating states often renege from the duty to finance the COBSEA's activities. As a result, the COBSEA has for many years faced serious financial challenges, with participating states failing to raise the rather modest total target amount of US\$170,000 per annum—far insufficient to cover all of the COBSEA's needs—to fund its projects.⁵⁴

Overall, the choice whether to adopt an RSC is not merely a matter of jargon. The non-adoption of an RSC is as much a political preference as it is legal because under Article 197 of the LOSC, soft and informal compliance mechanisms may fall within the meaning of “recommended practices and procedures consistent with the Convention.” But in the EAS, the aversion towards concrete legal frameworks and strong regional institutions undermines and leaves uncertain many aspects of marine environmental governance. As is discussed further in this article, the informal character of non-RSC RSPs like the EAS region invites lukewarm national attitudes in complying with duties of marine environmental protection and preservation. If the UNEP Regional Seas Programme is fully committed to encouraging states to adopt and ratify RSCs,⁵⁵ then the “choice” to pursue a non-RSC trajectory appears, rather,

to be no choice at all. The question that now arises is what the non-adoption of an RSC currently means in terms of compliance with the obligations found in Part XII of the LOSC. This is addressed in the next section.

Regional Marine Environmental Governance in the South China, Mediterranean and Caribbean Seas

Article 197 of the LOSC mentions the need to “[take] into account characteristic regional features” in the duty of states to make and elaborate rules for marine environmental governance. The UNEP Regional Seas Programme performs its mandate through regional platforms that usually encompass a wide variety of political, economic, and ecological systems. Despite these, there is no general consensus as to what a region is, or what makes one. A number of factors—geography, a shared history, or trade and economic interdependence—motivate states to address certain issues at the regional level. In addition, when states do identify as belonging to a region, they do so in different ways. Some regions are more integrated than others in terms of institutions and practices. But whatever its form, a sense of common objective underlies efforts at concerted political action on anything at all. This section considers how three specific regions operationalize the duty to make and elaborate rules for marine environmental protection and preservation under Article 197 of the LOSC.

Whether the “region” is a universally suitable and exportable unit of governance for marine environments,⁵⁶ it deserves continued scholarly attention because it functions as a site for the specification of the content and extent of obligations of marine environmental governance. The region has been shown to be useful in bridging knowledge gaps in both science and policy and in improving conflict mitigation.⁵⁷ Region-building, however, is subject to competing tensions between being large enough to address cross-border marine environmental concerns and being overly expansive that the region is rendered ungovernable due to the absence of a sense of belonging within the grouping.

This section highlights the experiences of the South China, Mediterranean and Caribbean RSPs. The last two are governed, respectively, by the Convention for the Protection of the Mediterranean Sea Against Pollution (Barcelona Convention),⁵⁸ its Protocols and amendments,⁵⁹ and the Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region (Cartagena Convention)⁶⁰ and its Protocols. The purpose is to assess whether the RSC-form is a modality of marine environmental governance consistent with Part XII of the LOSC. The Mediterranean and Caribbean seas were purposively selected on the basis of the following characteristics shared with the South China Sea: (a) all are large seas encircled by a number of states; and (b) all seas are covered by UNEP-administered RSPs.

The South China Sea

The South China Sea is located around the geographical center of maritime Southeast Asia.⁶¹ Spanning an area of 3.5 million square kilometers, it is home to the world's greatest biodiversity, with 1,027 species of fish, 91 species of shrimp, and 73 species of cephalopods in the Northern shelf and more than 520 fish species in the Southern shelf.⁶² The South China Sea's distinctive ecosystem owes much to its complex coastal geography—its small islands, islets, rocks, and its uneven depth, ranging from 100 meters in the Sunda shelf to over 5,000 meters in the Philippine basin.⁶³ The sea faces serious marine pollution from untreated waste water flowing from the region's major cities such as Guangzhou, Hong Kong, Ho Chi Minh City, Bangkok, Manila, and Singapore.⁶⁴ Two related critical issues in marine environmental governance in the South China Sea include (1) a voluntary marine environmental compliance mechanism based on state goodwill; and (2) an overly extensive regional seas area.

While various political tensions complicate cooperation over the Mediterranean, Caribbean, and South China seas, regional cooperation in the South China Sea in particular is fraught with flash points that may ignite into violent conflict. Among these are longstanding overlapping maritime jurisdictional claims, Chinese interference in the exploration activities of Vietnamese- and Philippine-licensed mining operators, and confrontations between U.S. intelligence-gathering vessels in China's exclusive economic zone (EEZ).⁶⁵ The ambiguity in the region's maritime legal framework fuels episodes of tension in interstate relations that sustain mutual suspicions, arms build-ups, and uncertainty about the future.⁶⁶ This vagueness, for instance, encourages China to project its strategic agenda into the sea even in zones falling within the jurisdiction of smaller states under the LOSC. Hence, governing the South China Sea stands upon a fluid foundation of "Asian Regionalism" (in contrast to treaty-based European regionalism) which "remains basically a market-driven formation of tightly knit economic cooperation fostered between different actors."⁶⁷ The South China Sea nations' high prioritization of economic development over the marine environment has led critics to brand the sea as a true example of the "tragedy of the commons"⁶⁸:

Eighty (80) percent of [its] coral reefs have been degraded or under serious threats in some places from sediment, overfishing and destructive fishing practices (such as the use of poison and dynamite), pollution, and climate change. Consequently, its reefs have become the most threatened and damaged reefs in the world.⁶⁹

Unlike the Mediterranean model discussed further in the next subsection, marine environmental governance in the South China Sea is subsumed under a larger EAS platform. The EAS bands the Philippine, Sulu, Celebes, Arafura, Andaman, Banda, Flores, South and East China, and Java Seas together with the Straits of Singapore, Malacca, and the oceans of Australia.⁷⁰ This vast expanse has practical consequences on effectively addressing the specific concerns of the distinct marine ecosystem of the South China Sea.

Regional marine environmental governance in the South China Sea has principally been through the 1981 Action Plan for the Protection and Development of the Marine Environment and Coastal Areas of the East Asian Region (EAS Action Plan). It is implemented by the Coordinating Body on the Seas of East Asia (COBSEA), a UN institution. The Action Plan was motivated by concerns over the effects and sources of marine pollution.⁷¹ Originally, the Action Plan involved only five countries: Indonesia, Malaysia, the Philippines, Singapore, and Thailand. In 1994, Australia, Cambodia, China, the Republic of Korea (ROK), and Vietnam became participating states.⁷²

The COBSEA's functions include facilitating Action Plan activities in concert with other regional and international organizations, supervising the implementation and assessment of COBSEA-sponsored projects and activities, and collecting and disseminating information among EAS countries and other regional and international organizations.⁷³ One of the features of the EAS Action Plan is its promotion of compliance with existing environmental treaties through "member country goodwill."⁷⁴

The EAS Action Plan designates the COBSEA as its sole decision-making body. At COBSEA meetings, states that are members of the Association of Southeast Asian Nations ("ASEAN") are represented by their respective Senior Officials on the Environment while non-ASEAN states appoint National Focal Points.⁷⁵ The COBSEA makes policy decisions on substantive and financial aspects of the Action Plan, such as approving budgetary resources required to support work plans and their allocation, reviewing the program's progress, and evaluating the results achieved.⁷⁶ Paragraph 69 of the Action Plan provides that financial support for activities *may* come from contributions from participating governments to the EAS Trust Fund, contributions from non-participating governments, support from any UN body *on a per-project funding basis*, regional development banks, and any other source of funding agreed to by the participating governments. The non-binding character of the obligations, however, has adversely impacted the EAS Trust Fund. In particular, Australia's withdrawal from the COBSEA in 2010 drastically decreased contributions to the Fund.⁷⁷

In 2008, COBSEA adopted a New Strategic Direction (NSD) for COBSEA (2008–2012).⁷⁸ The NSD is significant because it identifies some of the challenges encountered in the implementation of the EAS Action Plan. Some of these challenges are:

1. the absence of coordination in regional marine environmental initiatives, resulting in overlapping and inefficient use of human and financial resources;
2. the failure to address economic growth priorities and marine and coastal environmental issues sustainably; and
3. decreased UNEP support for EAS Regional Coordinating Unit operations has not been matched by a raise in participating governments' contributions to the EAS Trust Fund.⁷⁹

To address these challenges, the NSD introduces four operative and interlinked strategies with a view towards transforming the COBSEA into “a regional coastal and marine environmental coordinating center.”⁸⁰ These strategies involve information management (Strategy 1), national capacity building (Strategy 2), strategic and emerging issues (Strategy 3), and regional cooperation (Strategy 4). Overall, these strategies aim to reconfigure the COBSEA into a knowledge provider from past and current activities in the EAS region.⁸¹

Neither the Action Plan nor the NSD use mandatory language. Dang criticizes the Action Plan as being:

vague [and lacking] any specific commitment. There are not enough pragmatic, temporally and spatially planned activities to manage the marine environment. The functioning of the Programme is essentially project-based, which has met with lots of difficulties due to lack of political and financial commitment from its participating States. UNEP has also offered poor leadership and little interest in regional activities of the Programme. Obviously, these attitudes would affect the capacity of COBSEA to undertake any complicated endeavor such as coordinating the development of a regional network of [marine protected areas].⁸²

Despite its shortcomings, one of the COBSEA’s notable achievements is a project called “Reversing Environmental Trends in the South China Sea and Gulf of Thailand” supported by the UNEP and the Global Environmental Facility (GEF).⁸³ Initiated in 1996, the Project ended in 2008 with the adoption of the Strategic Action Programme for the South China Sea (SAP). The Project’s main thrust was the management and rehabilitation of marine habitats.⁸⁴ At base, the Project and SAP are designed to respond to the demands for a sustained stock of fish that forms the core of much of the region’s diet.⁸⁵ Post-NSD, however, the COBSEA has been relatively dormant because of insufficient funding, competition for professional expertise, and diminishing member state inertia, among others.⁸⁶

Additionally, the COBSEA is in apparent competition with another East Asian marine environmental organization, the Partnerships in Environmental Management for the Seas of East Asia (PEMSEA), established in 1993 with GEF funding.⁸⁷ The COBSEA and the PEMSEA have common country members, such as Cambodia, China, Indonesia, the Philippines, the ROK, Singapore, and Vietnam, and have significantly overlapping missions. Notably, Japan participates in the PEMSEA but not in the COBSEA. In 2010, the PEMSEA left the UN Development Programme (UNDP) to become a stand-alone international organization with its own legal personality and financial capacity.⁸⁸

The combined effect of these circumstances has led to fears of a possible shutdown for the EAS RSP.⁸⁹ Such fears, however, fail to consider possible ways through which the current RSP structure might be improved. A good possible starting point is to recast the detailed provisions of the EAS Action Plan in mandatory terms within the framework of a binding RSC. Legally binding agreements for marine conservation between EAS countries are actually quite common, albeit mostly bilateral.⁹⁰ Some argue that the COBSEA and the PEMSEA would be better-off merged together in the future to give the resulting organization an international legal platform which

the PEMSEA lost since its separation from the UNDP.⁹¹ With the above challenges of maintaining a non-RSC mode of marine environmental governance in the EAS, firming up the existing legal framework has now become an imperative in the context of an evolutive reading of Article 197 of the LOSC.

The Mediterranean Sea

The Mediterranean Sea spans 3,860 kilometers from east to west and has a total area of 2.5 million square kilometers.⁹² Among its critical environmental issues are the flow of surface water through the Strait of Gibraltar and the Dardanelles, precipitation and river run-off, its being almost completely enclosed by land, and a water replacement cycle that exceeds a century.⁹³ From the Strait of Gibraltar eastward to the Suez Canal, the sea straddles three continents, a great diversity of social, political and economic systems, and a number of overlapping supranational governance structures. Despite this diversity, the Mediterranean RSP provides an interesting example of how marine environmental governance is operationalized within an extensively integrated regional setting.

Regional cooperation in the Mediterranean dates back to the 1908 founding of the International Commission for the Scientific Exploration of the Mediterranean Sea (CIESM).⁹⁴ The following decades saw the development of regional initiatives on freedom and security of navigation and fisheries management.⁹⁵ In 1975, the European Community and Mediterranean riparian states adopted a Mediterranean Action Plan (MAP) to address the challenge of marine pollution. Initially, MAP principally employed strategies to promote conservation, eco-development, combat marine pollution, and integrate planning of environmental development and protection.⁹⁶ By the 1980s, MAP's scope of "protection" extended to coastal areas, with a refocusing on integrated coastal management and harmonizing environment and sustainable development in the early 1990s.⁹⁷ From the mid-1990s to the present, MAP's focus has shifted toward strengthening participation and governance among states, local authorities, the business community, and non-government organizations (NGOs).⁹⁸

The Barcelona Convention was adopted in 1976 as the pioneering RSC under the auspices of the UNEP Regional Seas Programme.⁹⁹ The UNEP's leading role in the development of the Barcelona Convention consolidated that body's authority in the area of regional water quality and marine resource management.¹⁰⁰ The adoption of the treaty was motivated by the Contracting Parties' desire to transcend the non-legally binding character of the MAP.¹⁰¹ In 1995, the Barcelona Convention was amended significantly to reflect the sustainable development shift in Mediterranean marine environmental governance from an exclusively anti-marine pollution focus.¹⁰² Marine environmental governance is now to be pursued considering "present and future generations in an equitable manner."¹⁰³

The Convention is a framework treaty outlining a broad scope of marine environmental obligations.¹⁰⁴ Its content is specified through the Protocols, currently six, addressing marine pollution by dumping from ships, aircraft or incineration at

sea,¹⁰⁵ cooperation to prevent and combat pollution from ships in emergency cases,¹⁰⁶ pollution from land-based sources and activities,¹⁰⁷ specially protected areas and biodiversity,¹⁰⁸ pollution resulting from the exploration and exploitation of the continental shelf, seabed and subsoil,¹⁰⁹ and prevention of pollution from trans-boundary movements and disposal of hazardous wastes.¹¹⁰ Taken together, the Barcelona Convention, its Protocols, and amendments are known as the Barcelona System.¹¹¹

While designated a “system,” Barcelona remains essentially a patchwork of discrete legal instruments. Contracting States are virtually free to select the version of the Barcelona Convention and the Protocols they wish to adopt.¹¹² Complications include Protocols taking too long to enter into force or states becoming parties to older or newer versions of an instrument.¹¹³ These complications are telling of the limitations of the convention-protocol system in which any subsequent amendments are only binding upon ratifying states.

Article 26 of the 1995 Barcelona Convention presents an interesting illustration of these complications. This requires Contracting States to report to the UNEP (as regional secretariat under Article 17, 1995 Convention), not only the measures they took to implement the Convention, but also the effectiveness of those measures. In practice, Contracting States only report on measures pertaining to obligations contained in Protocols they have adopted *and* have entered into force. In addition, Contracting States are rather reluctant to submit Article 26 reports, making it almost impossible to assess national implementation of Barcelona System obligations¹¹⁴ despite efforts at designing a Mediterranean framework for non-compliance patterned after major international multilateral environmental agreements.¹¹⁵

The Mediterranean’s convention-protocol approach to marine environmental governance, combined with strong regional integration, provides a promising model for a South China Sea RSC. However, strong regional *institutional* integration (through the European Union and other supranational institutions in the Mediterranean) does not necessarily translate to the integration of the legal framework for marine environmental governance. While institutional integration may lay the groundwork for further legal integration, in practice differences in short-term national economic development needs and priorities across the Mediterranean create resistance against stronger legal integration. The ability of Mediterranean states to select favorable instruments to ratify within the Barcelona System undermines the effectiveness and complicates the applicability of obligations to protect and preserve the marine environment from state to state. If one of the assumed advantages of treaty-making is rendering uniform the legal standards for compliance, then the ability to select instruments to adhere to within a treaty system undermines that uniformity.

The Caribbean Sea

With an area of around 2.75 million square kilometers, the Caribbean Sea is one of the world’s largest saltwater bodies.¹¹⁶ It is dotted by several countries that

are Small Island Developing States (SIDS) and are often faced with financial challenges.¹¹⁷ Numerous non-sovereign territories are also located in the region. For purposes of marine environmental governance, however, the expansive reconfiguration of the Caribbean Sea into a “Wider Caribbean Region” (WCR) encompasses four large marine ecosystems (LMEs), namely the Southeast Shelf LME off the Atlantic coast of the U.S. states of Florida, Georgia, and South Carolina; the Gulf of Mexico LME; the Caribbean Sea LME; and the North Brazil Shelf LME.¹¹⁸ This translates to a total combined area of about 15 million square kilometers.¹¹⁹ The WCR thus spans a wide range of capacities for governance shaped by differences in language, history, culture, and colonially-imposed administrative arrangements.¹²⁰ The Caribbean region is examined here in contrast to the strong tradition of regional integration of the Mediterranean model.

The WCR is administered by the UNEP Caribbean Environment Programme (CEP) through the 1983 Cartagena Convention and its Protocols.¹²¹ Like the Barcelona Conventions, the Cartagena Convention is also a framework treaty, with specific obligations set forth through the Protocols, namely: Cooperation in Combating Oil Spills,¹²² Specially Protected Areas and Wildlife (SPAW),¹²³ and Pollution from Land-Based Sources and Activities (LBS).¹²⁴ One of the Convention’s goals is to respond to the inadequacy of institutional, legal, and policy frameworks or mechanisms in the management of the WCR’s shared living marine resources.¹²⁵ At its inception, the Cartagena System had a strongly pro-development and anti-marine pollution focus.¹²⁶

Similar to the Barcelona Conventions, the Cartagena Convention defines “Convention area” as excluding the internal waters of the Contracting States.¹²⁷ Other than the general obligation to prevent, reduce and control pollution within the Convention area,¹²⁸ the Cartagena Convention also contains similarly worded provisions touching on pollution from ships,¹²⁹ dumping at sea,¹³⁰ LBS,¹³¹ seabed activities,¹³² airborne pollution,¹³³ and SPAW.¹³⁴ So far, only the content of obligations touching on SPAW and pollution from ships (oil spills) and LBS have been specified through the Protocols. Article 15 of the Cartagena Convention similarly performs the function of Article 17 of the 1995 Barcelona Convention, designating the UNEP CEP as RSP secretariat for the WCR.

One of the notable achievements of the Cartagena System is the SPAW Protocol implementing Article 10 of the Cartagena Convention. The Protocol pre-dates the 1992 Convention on Biological Diversity (CBD) and provides significant guidance in harmonizing the main aspects of conservation in subsequent international conservation agreements, the CBD, and the 1992 Rio Declaration.¹³⁵ On the other hand, the LBS Protocol has been noted for its potential to holistically integrate Contracting States’ endeavors in the consideration of both terrestrial and marine ecosystems, specifically in planning for nutrient reduction upstream and in coral reefs downstream.¹³⁶

Despite this, the Cartagena System faces issues arising from states’ ratification of select instruments within the system. The number of SPAW and LBS Protocols ratifications is only half that of the Cartagena Convention, suggesting that some Contracting States are either not interested in these Protocols’ issues or that they

lack the capacity to participate.¹³⁷ To illustrate, Article 7(1) of the SPAW Protocol mandates Contracting States to “establish co-operation programmes within the framework of the Convention” for “the selection, establishment, planning, management and conservation of protected areas.” Such protected areas, however, may be unilaterally established by a Contracting State under Article 4(1) of the SPAW Protocol. As the Protocol is silent as to when the actions covered in Articles 4(1) and 7(1) are deemed necessary,¹³⁸ the performance of these actions depend highly on the individual capacities of Contracting States. Again, with a wide range of governance capacities within the region, the promise of the Cartagena System rests upon an elusive “sweet spot” where national interest and financial capacity coincide. DiMento and Hickman comment:

Cartagena is a notably strong Convention, but it is [administered] by a small, young, and poorly financed secretariat. Since its creation, there have been budget problems within the CEP [regional coordinating unit] that are exacerbated by financial problems in the UNEP. Efforts for protection in the form of [marine protected areas (MPAs)] and [integrated coastal management] have been hampered. For example, many MPAS have been created but a majority of the newly created MPAS lack a management plan.¹³⁹

In a case study, Sheehy points out that as the second wealthiest Latin American jurisdiction, Mexico’s failure to implement its Cartagena Convention duties on oil pollution prevention and aerial surveillance do not bode well about the Convention as applied elsewhere in the WCR.¹⁴⁰

While the Cartagena System’s region-specific approach is crucial to moving regional collaborative efforts to an ecosystem-based management of the WCR, the number of country subscriptions into the system remain less than ideal to produce integrative responses to the region’s marine environmental issues.¹⁴¹ This, arguably, may be an adverse consequence of an overly expansive legal definition of the Cartagena Convention area. It exposes the weakness of a treaty-created Caribbean “region” to which some Contracting States only identify as belonging at a high or general level of abstraction. Some have suggested that taking a global approach to ocean governance, in which states participate “at levels of capacity and commitment that are appropriate for their level of development” would be more appropriate for the WCR.¹⁴² In such a global approach, one might imagine that all regional seas would come under a unified “World Ocean Programme” that does not differentiate among the “characteristic regional features” envisaged in Article 197 of the LOSC. Still, the WCR model is a good reminder that the determination of which states make up the regional platform for marine environmental governance is just as crucial as the selection of which instruments to ratify.

Marine Environmental Governance Without RSCs: Resistance, Not Uniqueness

The achievements and challenges of RSPS governed by RSCs complicate the question of whether Article 197, LOSC now means pursuing marine environmental

governance through codified treaty obligations. International environmental law-making has seen efforts to allocate functions and roles along regional and global lines—but without much success due to the failure to consider issues of legal and institutional fragmentation.¹⁴³ While “treaties” as objects of international law are conceptually distinct from state practice flowing from them,¹⁴⁴ changing marine environmental needs and regional relations demand thinking beyond the impulse that animated the conclusion of the LOSC in 1982. As the life of the law has not been logic, but experience,¹⁴⁵ the question of whether to adopt an RSC needs to be addressed in view of the achievements and shortcomings of an RSC-based model of marine environmental governance.

When states deliberately select protocols to adhere to within a treaty system, they undermine the scope and binding effect of the provisions and compromise the integrity of the convention-protocol model. But dismissing the convention-protocol model for solely this reason amounts essentially to a wholesale rejection of the intrinsic value of treaty-making and why it persists. Moreover, choosing specific protocols to ratify has significant legal consequences that carry interpretative implications for the framework RSC under Article 31(2) of the VCLT.¹⁴⁶ One possible implication is that the difference in the ratification status of related agreements (like protocols) amongst *all* RSP participants and those entered between *one or more* parties in connection with the principal treaty may give rise to problems of legal fragmentation within the treaty system in question. In the long-term, the deliberate selection of instruments undermines the integrity of the RSC as a tool for marine environmental governance.

In view of the general obligation to cooperate “in formulating and elaborating international rules, standards and recommended practices and procedures,”¹⁴⁷ the above discussions reveal a preference towards regional marine environmental rule-making and elaboration, with the LOSC acting as a “framework convention” for the development of specific RSCs.¹⁴⁸ The generality or specificity of the obligation to make and elaborate rules on marine environmental governance is immaterial to determining whether an treaty obligation was complied with based from a state’s conduct after the ratification of a treaty. In one case, the ICJ held that the subsequent conduct of state parties to a treaty demarcating the boundary between them prevailed even over that treaty’s precise definition of the boundary.¹⁴⁹ If treaties on a subject as restrictive as boundary delimitation can admit of evolutive interpretation, then more so should broad treaty commitments like those enshrined in Article 197, LOSC. The developments mentioned reveal that normative specification¹⁵⁰ happens even without Article 197 explicitly ordaining the making and elaboration of rules through a treaty.

Instead of state consent given in year X as the basis for its being bound by Treaty Y, it is better to examine the conduct of states in relation to that treaty over time to assess the consistency of state conduct with the treaty. This is why it is important to look at the promising practices of the RSPS featured in this section closely with their shortcomings.¹⁵¹ Balancing those successes and failures together, the political choice of the South China Sea states to proceed without an RSC is a resistance to

the obligation to make and elaborate on rules related to regional marine environmental governance.

Certainly, regional soft law and mechanisms built on “state goodwill” are carefully formulated with normative expectations from and among participating states. But experiences from the drafting of the great contemporary multilateral treaties like the LOSC and the Statute of the International Criminal Court have significantly amplified the law-making function of treaties.¹⁵² The implication for the EAS region is that its adherence to non-binding soft and informal mechanisms is not merely a matter of statistical uniqueness—especially as the COBSEA faces the possibility of a shutdown. The region, in refusing to adopt an RSC, forgoes the benefits of defined responsibilities and the allocation of rights and obligations under a concrete regional marine environmental legal framework.¹⁵³

Transcending State Goodwill: Some Proposals

This section puts forward some broad proposals on a prospective South China Sea RSC. Its premise is that a foundation of state goodwill prevents the EAS RSP from taking more decisive actions for the protection of the South China Sea. More importantly, treaty-making is not inherently anathema to EAS states, many of which have concluded a number of bilateral agreements, mostly on fishing.¹⁵⁴ The challenge is how to transform bilateral efforts into a multilateral platform that functions on the basis of allocated competences and enforceable rights and obligations. This section makes four proposals.

The first pertains to defining the Convention area for a future South China Sea RSC to address the sea’s specific marine environmental configuration. In this regard, regional platforms for marine environmental governance present a sufficiently practicable way of protecting and preserving marine environments, especially for developing states without much capacity to perform acts in remote areas beyond national jurisdiction. Defining a prospective Convention area must strike a fine balance between the cross-border character of marine environmental issues and the decidedly political exercise of selecting the region’s constituents. This is to effectively address specific needs of regional seas, but without the least-common-denominator attitude that plagues many RSPs. The vast geographical coverage of the current RSP framework in the EAS stretches the limits of its governability and fails to consider the “characteristic regional features” of the South China Sea marine ecosystem. As mentioned previously, the South China Sea is but one of the many bodies of water covered by the present EAS Action Plan. Yet, as one of the world’s most critical sites of marine megadiversity, the South China Sea barely receives the attention it needs from an expansive definition of the EAS region.

Region-building is an inherently political exercise. In the WCR, for example, the Cartagena Convention’s overbroad definition of its Convention area creates a region that does not necessarily coincide with its members’ imagination of what

that region might look like. Here, the experience in defining the Barcelona Convention area for the Mediterranean RSP is instructive:

During the negotiations of the first [Barcelona Convention] ... a proposal made by the former USSR to include the Black Sea within the scope of the Barcelona Convention was rejected so as to prevent any possible influence of the USSR in the region.¹⁵⁵

A second proposal would be to rethink the UNEP's role in regional seas governance. The UNEP must be credited for its notable contributions in the development of RSCs. However, its eminent leadership role might inhibit the growth of a sense of ownership over those conventions. For one, the UNEP's success in steering the Barcelona Convention into conclusion in 1976 should not be taken as a development which is readily transplantable into places like EAS where colonial history and great imbalances in power relations mire even basic notions of trust. Regional seas action plans and conventions are then concluded in standard language and are adopted without much discussion and negotiation. The results are (1) a standard-form RSC that only attracts participation at high levels of abstraction and are unsuited to the specific circumstances of the relevant sea; and (2) the reluctance of participating states to accept a more empowered role for secretariats that are often seen as UN agencies rather than a genuine regional coordinating body. In this regard, COBSEA's thrust toward becoming a central repository of regional marine scientific information could potentially ease participating states into agreeing to clothe a future South China Sea regional coordinating body with wider-reaching competences.

Provisions in the Barcelona and Cartagena conventions committing those RSPs' secretariat functions to the UNEP mean that actions of consequence to those regions are decided elsewhere by virtue of another institution's supposed expertise in a specific region's marine environment. Yet, such claims of expertise ought to invite interrogation in view of standard-form RSCs. The privileging of external expertise over local or regional ways of knowing the sea has proven detrimental, especially to regions with developing states.¹⁵⁶ In considering a future South China Sea RSC, regional capacity-building must resist the tendency to focus on expertise learned from elsewhere, and instead inform itself through local knowledge of the sea. This does not mean complete separation from the UNEP Regional Seas Programme or ignoring valuable lessons that might be learned from other RSPs—some RSPs are institutionally independent from the UNEP but maintain close ties with the latter to exchange policy advice and experiences.

The third proposal is to merge the COBSEA and PEMSEA as earlier mentioned, but with a further proposal to specifically tailor the combined organization's capacities to the needs and circumstances of the South China Sea marine environment. This means that the pursuit of a South China Sea RSC will not have to start from scratch. Regional marine governance mechanisms do exist, but their success is hampered by poor coordination and little learning from each other's activities. Institutional consolidation will partly address the problems of fragmentation in regional marine governance over the South China Sea.

Lastly, a future South China Sea RSC must depart from its *ad hoc*, project-based focus and instead adopt a long-term outlook in the preservation and protection of the sea. In terms of funding, this means Contracting States committing to make regular contributions on an economic capacity or a “polluter-pays” basis, or both. More importantly, leaving the project-based mode will align the region to a more integrated approach to marine environmental governance which sustains state participation and interest beyond the termination of specific projects.

Conclusion

This concluding section sounds a cautionary note: the manifold challenges of transcending soft law and state goodwill in the EAS region will not nearly be met solely through blind faith in the law-making function of treaties. This is equally true of law-making in both municipal and international legal systems. As experiences from the Mediterranean, Caribbean, and South China Seas indicate, convention-protocol-type legal frameworks do not guarantee compliance; a host of other circumstances play into producing a desirable equilibrium for regional marine environmental governance. Taking legal action takes time, and in international environmental law it is usually (and unfortunately) the case that action is prompted only by situations involving egregious damage to the environment.

Yet, incrementally pernicious acts damaging the South China Sea mostly occur without consequence for the author(s) of those acts. These eventually amount to extensive marine environmental damage over the long term. While other regions have taken steps towards formalizing normative expectations in the form of RSCs, South China Sea states remain non-committal and evasive of their obligations to make and elaborate rules for marine environmental governance under Article 197 of the LOSC. Long-term marine damage in the South China Sea ought to spur a rethinking of the region’s dubious premium on state goodwill: an overestimated benevolence that places the region at odds with evolving international marine environmental legal obligations.

Notes

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2. *United Nations Convention on the Law of the Sea*, 10 December 1982, 1833 U.N.T.S. 397 (entered into force 16 November 1994) arts. 192–237 (LOSC).
3. The Arctic, the Northwest Pacific, the South Asian Seas, and the East Asian Seas.
4. This paper uses “South China Sea” as that sea’s neutral hydronym as listed in International Hydrographic Organization, *Limits of Oceans and Seas* (Monte-Carlo: Imp. Monégasque, 1953), p. 32, even as the littoral states have given the sea official local or vernacular names.
5. Coordinating Body on the Seas of East Asia, “About COBSEA,” *COBSEA*, 2005, <http://www.COBSEA.org/aboutCOBSEA/background.html>, accessed 10 September 2018.
6. Kim DoHyang Reimann, “Testing the Waters (and Soil): The Emergence of Institutions for Regional Environmental Governance in East Asia,” in Saadia M. Pekkanen, ed., *Asian Designs*:

Governance in the Contemporary World Order (Ithaca, NY: Cornell University Press, 2016), p. 207, <https://doi.org/10.7591/9781501706226-013>.

7. “Cooperation on a global or regional basis. States shall cooperate on a global basis and, as appropriate, on a regional basis, directly or through competent international organizations, in formulating and elaborating international rules, standards and recommended practices consistent with this Convention.”

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11. “There shall be taken into account, together with the context ... [any] subsequent practice in the application of the treaty which establishes the agreement of the parties regarding its interpretation.”

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14. Nilufer Oral, “Implementing Part XII of the 1982 UN Law of the Sea Convention and the Role of International Courts,” in Nerina Boschiero, et al., eds., *International Courts and the Development of International Law: Essays in Honour of Tullio Treves* (The Hague: Asser, 2013), pp. 404–5.

15. *Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter*, 29 December 1972, 1046 U.N.T.S. 120 (entered into force 30 August 1975).

16. *Convenio de cooperación para la protección y el desarrollo sostenible de las zonas marinas y costeras del Pacífico Nordeste* (Convention on Cooperation for the Protection and Sustainable Development of the Marine and Coastal Zones of the Pacific North-East [author’s translation]). Not yet in force as of this writing.

17. UNEP Regional Seas Programme, “Overview,” *UN Environment*, undated, <http://web.unep.org/regionalseas/who-we-are/overview>, accessed 10 September 2018.

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20. Needham and Jedynack-Copley, *supra* note 18, p. 39 (citations omitted).

21. Namely the Antarctic, Arctic, Baltic, Black Sea, Caspian, Eastern Africa, East Asian Seas, Mediterranean, North-East Atlantic, North-East Pacific, Northwest Pacific, Pacific, Red Sea and Gulf of Aden, ROPME Sea Area, South Asian Seas, South-East Pacific, West and Central Africa, and Wider Caribbean.

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23. Wider Caribbean, Mediterranean, East Asian Seas, East Africa, Northwest Pacific, West and Central Africa, and Caspian Sea.

24. UNEP Regional Seas Programme, “Regional Seas Programmes,” *UN Environment*, undated, <http://web.unep.org/regionalseas/who-we-are/regional-seas-programmes>, accessed 10 September 2018.

25. Arctic, Antarctic, Baltic Sea, and North-East Atlantic.

26. UNEP Regional Seas Programme, “Independent Regional Seas Programmes,” *UN Environment*, undated <http://web.unep.org/regionalseas/independent-regional-seas-programmes>, accessed 10 September 2018.

27. UNEP Regional Seas Programme, *supra* note 24.

28. UNEP Regional Seas Programme, “Regional Seas Action Plans,” *UN Environment*,

undated, <http://web.UNEP.org/regionalseas/who-we-are/regional-seas-action-plans>, accessed 10 September 2018.

29. Michael A. Jacobson, "The United Nations' Regional Seas Programme: How Does It Measure Up?," *Coastal Management* 23(1) (1995), p. 21, <https://doi.org/10.1080/08920759509362254>.

30. UNEP Regional Seas Programme, *supra* note 24.

31. Jacobson, *supra* note 29, p. 21.

32. Hugh Kirkman, "The East Asian Seas UNEP Regional Seas Programme," *International Environmental Agreements* 6 (2006), p. 306, <https://doi.org/10.1007/s10784-006-9011-5>.

33. UNEP, *supra* note 13, pp. 4–7.

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35. *Ibid.*, at para. 32(b).

36. *Ibid.*, at para. 32(f)(iv).

37. *Statute of the International Court of Justice*, 26 June 1945, 1 U.N.T.S. XVI (entered into force 24 October 1945) art. 38 (*I.C.J. Statute*).

38. *VCLT*, *supra* note 12, art. 2(1)(a) (emphasis added).

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40. *Fisheries Case (United Kingdom v Norway) (Judgment)* [1951] I.C.J. Rep. 116, p. 138.

41. Nilufer Oral, *Regional Co-Operation and Protection of the Marine Environment Under International Law: The Black Sea* (Leiden: Martinus Nijhoff, 2013), p. 94.

42. Boyle, *supra* note 8, p. 357.

43. Yoshifumi Tanaka, *The International Law of the Sea* (Cambridge, UK: Cambridge University Press, 2012), p. 314.

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49. Rochette and Billé, *supra* note 22, p. 440.

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53. Juan Luís Suárez de Vivero and Juan Carlos Rodríguez Mateos, "Marine Governance in the Mediterranean Sea," in Michael Gilek and Kristine Kern, eds., *Governing Europe's Marine Environment: Europeanization of Regional Seas or Regionalization of EU Policies?* (Farnham, UK: Ashgate, 2015), p. 223.

54. Van Dyke, *supra* note 1, p. 100.

55. Kirkman, *supra* note 32, p. 307.

56. Ludger Kühnhardt, *Region-Building, Volume II: Regional Integration in the World: Documents* (Oxford: Berghahn Books, 2010), p. 3.

57. Michael Gilek, et al., "Science and Policy," in Michael Gilek and Kristine Kern, eds., *Governing Europe's Marine Environment: Europeanization of Regional Seas or Regionalization of EU Policies?* (Farnham, UK: Ashgate, 2015), p. 150.

58. *Convention for the Protection of the Mediterranean Sea Against Pollution*, 2 February 1976, 1102 U.N.T.S. 27 (entered into force 12 February 1978) (*Barcelona Convention 1976*).

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106. Adopted 25 January 2002; entered into force 17 March 2004.
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- (a) Any agreement relating to the treaty which was made between all the parties in connexion with the conclusion of the treaty;
 - (b) Any instrument which was made by one or more parties in connexion with the conclusion of the treaty and accepted by the other parties as an instrument related to the treaty."
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Biographical Statement

Alexis Ian P. Dela Cruz is concurrently Associate Solicitor at the Office of the Solicitor General of the Philippines and a law lecturer at Far Eastern University. He obtained his LLM from the University of Melbourne in 2017 as an Endeavour Post-graduate Scholar of the Australian Government and his JD and bachelor's degrees from the University of the Philippines. He submitted an earlier draft of this Article as part of the LLM coursework at the University of Melbourne. He thanks Professor Margaret Young, Dr. Chantal Morton, and the anonymous peer reviewers for their insightful feedback.

The *Timor Sea Conciliation* and Lessons for Northeast Asia in Resolving Maritime Boundary Disputes

Natalie Klein

Structured Abstract

Article Type: Research Paper

Purpose—The purpose of the article is to examine the implications of the *Timor Sea Conciliation* for other maritime boundary disputes.

Design, Methodology Approach—The approach involves a textual analysis of the maritime boundary conciliation procedure in the UN Convention on the Law of the Sea; critical assessment of its application in the *Timor Sea Conciliation*; and proposed application to maritime boundary disputes existing between Korea and Japan, and Korea and China.

Findings—The *Timor Sea Conciliation* has provided important lessons for states seeking to resolve their maritime boundary disputes. However, there are diverse legal constraints as well as political issues to consider in deciding on whether conciliation is an appropriate dispute resolution technique to use.

Practical Implications—This article will be of interest to government and legal advisers seeking to resolve maritime boundary disputes. International law and international relations scholars will appreciate considering how the conciliation process may be utilized in different settings.

Originality/Value—This analysis provides original perspectives on conciliation under the UN Convention on the Law of the Sea for the settlement of maritime boundary disputes. It provides new factors to consider in reaching agreement

UNSW Sydney, Faculty of Law, Kensington NSW 2109 Australia; email:
n.klein@unsw.edu.au; Tel: +61 2 9385 6566



Journal of Territorial and Maritime Studies / Volume 6, Number 1 / Winter/Spring 2019 / pp. 30–50 /
ISSN 2288-6834 (Print) / © 2018 Yonsei University

with regards to the delimitation of Korea's maritime boundaries with China and Japan.

Keywords: conciliation, Korea,
maritime boundary disputes, Timor-Leste

Introduction

Timor-Leste instituted compulsory conciliation against Australia in 2016 to resolve what had become, at least for Timor-Leste, an intractable maritime boundary dispute between the two states in the Timor Sea.¹ The conciliation proceeded under the United Nations Convention on the Law of the Sea (UNCLOS or Convention),² which provides for this process when maritime boundary disputes are otherwise excluded from the compulsory dispute settlement proceedings entailing binding decisions.³ The *Timor Sea Conciliation* concluded with the release of the Conciliation Commission's Report and Recommendations in May 2018.⁴ It provides an important opportunity for other states party to UNCLOS to learn from the benefits and limitations of this dispute settlement process in relation to their own unresolved maritime boundaries. Several such boundary disputes may be identified in East Asia and this article focuses on the undelimited China-Korea and Japan-Korea maritime boundaries by way of example.

Korea became a party to UNCLOS in 1996. In doing so, Korea not only accepted the obligations and gained the rights granted in that Convention, but also consented to compulsory arbitration or adjudication of disputes arising under UNCLOS. The dispute settlement regime set out in Part XV of UNCLOS is considered an integral part of the package deal agreed during negotiations at the Third UN Conference on the Law of the Sea.⁵ However, the recognized national importance of maritime boundaries allowed states the possibility of issuing a declaration excluding certain maritime boundary disputes from compulsory arbitration or adjudication.⁶ Korea made such a declaration in 2006—thereby ensuring that its maritime boundary disputes with Japan and China could not be referred to arbitration or adjudication.⁷

Korea has delimited parts of its maritime boundary, such as in the Korea Strait (also referred to as the Tsushima Strait), which has been split into an Eastern Channel and Western Channel by Tsushima Island, and is approximately 20 nautical miles wide at its narrowest point.⁸ Both Japan and Korea have restricted their territorial waters to three nautical miles from their respective baselines, to allow for high seas freedom of navigation in the remaining waters.⁹ Also, under the Agreement between Japan and the Republic of Korea concerning the Establishment of Boundary in the Northern Part of the Continental Shelf Adjacent to the Two Countries,¹⁰ the agreed continental shelf boundary is based on a median line that commences at the midpoint between Korea's Cheju Island and Japan's Goto Retto, and heads north toward the Korean coastline (as a result of the Japanese island, Tsushima, in the Korean Strait), and then veers back away from the Korean coastline as it continues north.¹¹

However, Korea and Japan agreed in 1998 on two provisional fishing zones in

disputed areas, which allow each country to have a 35 nautical mile zone from their coastline that is referred to as an Exclusive Economic Zone (EEZ).¹² Another joint development zone had been agreed on 30 January 1974 in the southern area of Korea and Japan's overlapping continental shelves.¹³ Korea and China have also agreed on a transitional zone for five years after the entry into force of their Fisheries Agreement, as well as an ongoing provisional zone in the Yellow Sea.¹⁴

An undelimited boundary remains in the area extending from the northernmost point of the Korea Strait to the islands of Dokdo, because of the ongoing territorial sovereignty dispute between Korea and Japan concerning Dokdo.¹⁵ While negotiations proceed slowly with China, the maritime boundary between Korea and Japan around Dokdo is unlikely to be determined so long as Japan continues to contest Korea's sovereignty to Dokdo.

The dispute settlement procedure under UNCLOS is thus open to Korea, Japan and China to assist in the delimitation of their maritime boundaries. Each state has preferred negotiations thus far, which has commonly been used to delimit maritime boundaries between neighboring states. Negotiations allow diverse factors to be considered, sometimes beyond the legal requirements or considerations for maritime boundary delimitation. When maritime boundaries remain unresolved, conflicts between neighboring states may occur. This tension has been particularly notable when fishing vessels of one state are barred or arrested by the other state. There may also be an economic imperative to delimit a maritime boundary so that concession areas may be offered to oil and gas companies to explore and exploit the natural resources of the continental shelf. An interim arrangement may be concluded between the states concerned, allowing for joint exploitation and management. Australia and Timor-Leste had proceeded down this path, but Timor-Leste sought greater certainty and control over what it considers as its national resources. At present, Korea has also opted for provisional arrangements in relation to fishing with both China and Japan and has also concluded an agreement with Japan in relation to their overlapping continental shelf areas, outside the region of Dokdo. But for how long should such provisional arrangements stay in place?

Where negotiations do not provide a satisfactory resolution, the imperative to settle maritime boundaries with finality becomes greater. It is in this context that turning to third-party dispute resolution may become a more attractive option for states. While it takes some control away from the states concerned, third-party intervention may completely change the dynamics in settling maritime boundary disputes. To turn to arbitration or adjudication, the court or tribunal produces a legally-binding response to claims relating to the maritime boundary. Conciliation does not produce a legally-binding response but engages a commission in producing recommendations to facilitate maritime boundary delimitation.

While Korea (and China)¹⁶ have excluded the possibility of arbitration or adjudication for maritime boundary delimitation under UNCLOS, there may still be an option for each state to refer the dispute to a conciliation commission constituted under Annex V of UNCLOS. As noted, Timor-Leste took this approach to resolve

its differences against Australia. This article therefore considers whether this experience holds any lessons for other states, notably Korea, China and Japan, in managing their own maritime boundary disputes.

To answer this question, the article first briefly explains the operation of the dispute settlement procedure under UNCLOS and assesses in detail the compulsory conciliation option for maritime boundary disputes. It then examines the experience of the *Timor Sea Conciliation* and draws out lessons for Korea in relation to its unresolved maritime boundaries with Japan and China, respectively. The article concludes by finding that UNCLOS dispute settlement procedures offer limited options, and perhaps unwanted or unexpected opportunities, when settling maritime boundaries in areas of overlapping EEZ and continental shelves.

Resolution of Maritime Boundary Disputes Under UNCLOS

Within Part XV of UNCLOS, Article 286 provides:

Subject to section 3, any dispute concerning the interpretation or application of this Convention shall, where no settlement has been reached by recourse to section 1, be submitted at the request of any party to the dispute to the court or tribunal having jurisdiction under this section.

This provision establishes the core of the compulsory dispute settlement regime under UNCLOS and indicates when states may resort to mandatory arbitration or adjudication.

Alternative Means of Dispute Settlement

To compel another state to engage in either arbitration or adjudication under UNCLOS, Section 1 provides that states instituting proceedings must meet some conditions. Article 283 requires states to proceed to an exchange of views regarding dispute settlement procedure.¹⁷ Consideration must further be given as to whether other dispute settlement procedures prevail over UNCLOS dispute settlement by virtue of either Article 281 or Article 282. These provisions anticipate that a state may refer its dispute to processes other than those under UNCLOS, but the circumstances in which these processes trump the UNCLOS dispute settlement regime are quite limited.¹⁸

Subject Matter Jurisdiction

Where no settlement is reached under Section 1, a state may choose to refer a dispute concerning the interpretation or application of UNCLOS to arbitration or adjudication. Recent arbitral awards under UNCLOS indicate that the subject matter

jurisdiction of any court or tribunal constituted under the Convention is broad.¹⁹ There has been debate as to whether territorial disputes may also fall within the scope of the UNCLOS dispute settlement regime, which is relevant to Japan's claims over Dokdo.²⁰ However, the *Chagos Archipelago* arbitration indicated that there was no such jurisdiction unless it was a minor question of territorial sovereignty incidental to the resolution of another dispute submitted under the Convention.²¹

Disputes Excluded from Compulsory Arbitration or Adjudication

As recognized in Article 286, a state's referral of a dispute to arbitration or adjudication under UNCLOS is subject to Section 3 of Part XV. This Section comprises of Article 297, which has exceptions and limitations to the disputes that a state may submit to arbitration or adjudication, and Article 298, which allows state parties to exclude at their option particular categories of disputes. Article 297 primarily addresses disputes that may arise in relation to the coastal state's exercise of sovereign rights or jurisdiction in its EEZ. Most relevant for present purposes is Article 298, which allows states to exclude "disputes concerning the interpretation or application of articles 15, 74 and 83 relating to sea boundary delimitations, or those involving historic bays or titles."²² Articles 15, 74 and 83 concern the delimitation of overlapping entitlements to territorial sea, EEZ and continental shelf, respectively. As noted at the outset, Korea and China have both declared that compulsory procedures entailing binding decisions will not apply to the maritime boundary disputes listed in Article 298. Yet, this exclusion may still allow for the possibility of compulsory conciliation, which is examined immediately below.

Compulsory Conciliation of Maritime Boundary Disputes

Conciliation is a dispute settlement process that allows a third party to assess independently a range of factors and devise possible solutions for the states in dispute. The Institut de Droit International defined conciliation as follows:

... a method for the settlement of international disputes of any nature according to which a Commission set up by the Parties... proceeds to the impartial examination of the dispute and attempts to define the terms of a settlement susceptible of being accepted by them, or of affording the Parties, with a view to its settlement, such aid as they may have requested.²³

The key elements of conciliation encapsulated in this definition, which multilateral and regional treaties also reflect, are investigating and clarifying issues in dispute (facts and/or law) and seeking to bring the parties to agreement through recommendations of mutually acceptable solutions.²⁴

As noted in the preceding section, Article 298(1)(a) of UNCLOS anticipates that parties that have excluded maritime boundary disputes from compulsory procedures

entailing binding decisions are to resort to conciliation instead. Conciliation is compulsory in this situation inasmuch as a party to UNCLOS may institute conciliation proceedings against another party that has issued a declaration under Article 298(1)(a) without any further act of consent.

Nonetheless, for the purposes of compulsory conciliation under Article 298(1)(a), there are a number of requirements that must be satisfied. If the parties disagree as to the competence of the conciliation commission, particularly because one party alleges that these requirements are not met, the commission is to resolve whether it has the jurisdiction to proceed.²⁵ The conditions include that the dispute has arisen subsequent to the entry into force of UNCLOS; no agreement is reached in negotiations within a reasonable period of time; and the dispute does not involve the concurrent consideration of unsettled territorial disputes.²⁶ Further, compulsory conciliation is not available for “any sea boundary dispute finally settled by an arrangement between the parties, or to any such dispute which is to be settled in accordance with a bilateral or multilateral agreement binding upon those parties.”²⁷

Annex V of UNCLOS sets out the conciliation procedure, including requirements for the constitution of the conciliation commission and allowing the commission to determine its own procedure.²⁸ The functions of the commission are to “hear the parties, examine their claims and objections, and make proposals to the parties with a view to reaching an amicable settlement.”²⁹ The procedure is to run relatively quickly,³⁰ with the commission to issue a report within 12 months of its constitution.³¹ The report is to “record any agreements reached and, failing agreement, its conclusion on all questions of fact or law relevant to the matter in dispute,” as well as any recommendations considered appropriate for an amicable settlement.³²

The parties are required to negotiate an agreement based on the commission’s report.³³ Article 298(1)(a)(ii) provides that “if these negotiations do not result in an agreement, the parties shall, by mutual consent, submit the question to one of the procedures provided for in Section 2, unless the parties otherwise agree.” This wording may be understood to reinforce the paramountcy of state discretion in deciding how to settle maritime boundary disputes as well as the importance of a consensual resolution. It is therefore critical to take note that even if Korea, China or Japan were compelled to engage in a conciliation process, that state would not ultimately have to be bound by any outcome arising from that conciliation or ensuing negotiations. Consequently, if Korea, China or Japan initiated conciliation, a definitive resolution of a maritime boundary dispute is not guaranteed.

The *Timor Sea Conciliation Experience*

In light of the hurdles to engage in compulsory conciliation to resolve a maritime boundary dispute and the possibility of failing to resolve the dispute as an outcome, it is not unreasonable to consider why a state would opt for such a course of action.

In this regard, it is useful to contemplate the motivation for Timor-Leste in instituting conciliation against Australia and the outcome achieved.

The maritime boundary between Australia and Timor-Leste had been an issue of concern between the two countries since Timor-Leste gained its independence in 2002.³⁴ The undelimited area in the Timor Sea between Australia and Timor-Leste contains important oil and gas fields.³⁵ Following Timor-Leste's independence in 2002, the two states entered into a series of bilateral agreements to allow for joint exploitation; the two most relevant being the Timor Sea Treaty,³⁶ and the Treaty on Certain Maritime Arrangements in the Timor Sea (CMATS Treaty).³⁷ The Timor Sea Treaty provided for the shared exploration and exploitation of a Joint Petroleum Development Area (JPDA).³⁸ Under the Timor Sea Treaty, Timor-Leste received 90 percent of petroleum production whereas Australia was allocated 10 percent. The CMATS Treaty had two important purposes. The first was to allow for a 50-50 revenue-sharing regime in relation to the Greater Sunrise field, which straddled the eastern side of the JPDA and Australia's maritime area with roughly 20 percent of the field falling within the JPDA. Second, it established a moratorium in relation to the fixing of a permanent maritime boundary between the two countries for a period of fifty years, or five years after exploitation of the Greater Sunrise field ceases, whichever occurs earlier.³⁹ Further, Article 4 of that treaty sought to prohibit any third-party engagement in relation to any aspect of the maritime boundary and resource exploitation.

In light of this moratorium in the CMATS Treaty, Australia objected to Timor-Leste instituting conciliation in violation of this bilateral agreement. However, the Commission considered that whether Timor-Leste was in violation of the CMATS Treaty or not was not a question it could resolve but, rather, it could only look to see if the conditions for the Commission to proceed were met.⁴⁰ Nor did the dispute settlement mechanism in the CMATS Treaty prevail over the dispute settlement procedures available under UNCLOS in the terms of Article 281.⁴¹ Australia was equally unsuccessful in alleging that the dispute arose after the entry into force of UNCLOS for the parties (2013), as the Commission considered that the relevant date was the entry into force of UNCLOS more generally (1994).⁴² The Commission also determined that the parties' negotiations were sufficient,⁴³ and that the provisional nature of the joint arrangement meant that none of the agreements between Timor-Leste and Australia constituted sea boundary disputes that had been "finally settled." All members of the Commission therefore agreed that they had competence to undertake the conciliation.

The Commission held initial meetings with Timor-Leste and Australia after its decision on competence and admissibility, which were described as "part of an ongoing, structured dialogue in the context of conciliation."⁴⁴ Considering Australia's challenge to proceeding with compulsory conciliation and the high levels of distrust that existed between the parties in relation to the resources and boundary issues between them,⁴⁵ the Commission emphasized that establishing trust was a critical first step.⁴⁶ It could be expected that in any contentious proceeding where one party is unwillingly brought before a third-party process that the commission (or even

court or tribunal) would need to demonstrate that it can deal fairly and credibly with the dispute for the parties to engage properly in the process and accept the outcome of that process. Trust in the process is a crucial element when the resolution of the dispute is set against a backdrop of contested positions between the parties over a lengthy period of time.

In the *Timor Sea Conciliation*, the parties first agreed on a package of confidence-building measures.⁴⁷ It is significant that one such measure was an indication from Australia that it would work toward “creat[ing] the conditions conducive to the achievement of an agreement on permanent maritime boundaries in the Timor Sea.”⁴⁸ Signaling a willingness to contemplate a permanent maritime boundary was a notable change in Australian policy as enshrined in the CMATS Treaty.⁴⁹ Further measures included Timor-Leste’s withdrawal of its claims against Australia in two arbitrations commenced under the Timor Sea Treaty,⁵⁰ and the termination of the CMATS Treaty, with agreement between the parties on the legal consequences of that termination for relevant stakeholders.⁵¹

The Report of the Commission tracks through the variety of meetings held with the parties’ representatives, noting that exchanges were conducted not only in person, but also via telephone and email and with varying degrees of formality.⁵² To this end, the Commission had in place a delegation power so that a chair or delegation of the Commission could conduct meetings and report back to the other members of the Commission.⁵³ This approach would have allowed for more flexible scheduling than may have been possible in coordinating the schedules of five commissioners on every occasion. Members of the Commission predominantly met with the parties separately,⁵⁴ and all discussions were conducted on a “without prejudice” basis in the event the process did not ultimately yield a resolution of the dispute.⁵⁵ Confidentiality was also a critical dimension in the Commission’s procedures.⁵⁶ All these elements created an environment for fruitful discussions that allowed the Commission to determine each state’s position as well as the reasons and motivations for their position.⁵⁷

The parties submitted written papers to the Commission, but the Report of the Commission indicates that these position papers were not to be formal pleadings as might be understood in an arbitration or adjudication.⁵⁸ In addition, the Commission itself produced “non-papers” and developed written proposals for the parties’ consideration.⁵⁹ The process thus appears to comprise of the formalities of a conciliation but also a mediation, where a third party directs and/or manages negotiations between the parties.⁶⁰ Such an active role may be contemplated by virtue of the Commission’s authority to “draw the attention of the parties to any measures which might facilitate an amicable settlement of the dispute.”⁶¹

As a result of the tripartite efforts and cooperation under the conciliation procedure, Timor-Leste and Australia were able to agree on a permanent maritime boundary. The parties signed the Treaty on Maritime Boundaries at the United Nations on 6 March 2018,⁶² and it is expected to be ratified by both states. It is a complicated delimitation because it had to account for the facts that Timor-Leste still must negotiate a continental shelf boundary with Indonesia and because the

eastern lateral boundary runs through the Greater Sunrise field.⁶³ The exploitation of Greater Sunrise proved to be a significant obstacle in resolving the dispute between Timor-Leste and Australia. Timor-Leste had initially made a claim to a maritime boundary that would have put Greater Sunrise under its exclusive jurisdiction.⁶⁴ As noted previously, the existing maritime agreements resulted in this field being partly in the JPDA and partly under Australia's exclusive jurisdiction. The Commission, however, steered the parties toward maintaining a joint exploitation regime.⁶⁵ Under the Treaty on Maritime Boundaries, it was agreed that the revenue would be split whereby "the shares of upstream revenue allocated to each of the Parties will differ depending on downstream benefits associated with the different development concepts for the Greater Sunrise gas field."⁶⁶ The outstanding issue was the development concept associated with the exploitation of Greater Sunrise, which concerned whether the gas would be processed in Timor-Leste or in Darwin, Australia. The Commission produced a paper on "Comparative Development Benefits of Timor LNG and Darwin LNG," as well as "a condensed analysis of the comparative economics of the two concepts" to aid future discussions.⁶⁷ Consequently, the Report includes one recommendation "that the Parties continue their discussions regarding the development of Greater Sunrise with a view to reaching agreement on a concept for the development of the resource."⁶⁸

The *Timor Sea Conciliation* has therefore provided many important lessons for other state parties to UNCLOS with unresolved maritime boundary disputes. First, Australia's challenge to the competence of the Commission has highlighted that there are several conditions to be met for a compulsory maritime boundary conciliation to proceed. Meeting those conditions does not appear especially onerous considering the Commission's decision, however. Second, the conciliation process does not necessarily resemble adjudication or arbitration in terms of requiring formal pleadings and oral presentations. Further, whereas an assurance provided by a State in the context of an arbitration or adjudication proceeding might be viewed as formally binding that State, in the conciliation setting, any proposals could remain without prejudicing the legal position of the State. Third, the high engagement of the Commission in moderating the discussions between the parties resembled what may be more commonly described as mediation.⁶⁹ This approach may or may not be favored by other States engaging in compulsory conciliation in the future. It did lead to an amicable resolution as between Timor-Leste and Australia in delimiting a permanent maritime boundary. Finally, the Commission's Report described the dispute between Timor-Leste and Australia as "ripe for resolution" and, despite Australia's initial reluctance, both states perceived advantages in resolving this dispute.⁷⁰ Not every political setting of an unresolved maritime boundary will be similarly "ripe for resolution." In light of these lessons, the next two sections consider what certain maritime boundary disputes in Northeast Asia may learn from the *Timor Sea Conciliation* experience.

Maritime Boundary Dispute Between Japan and Korea

As explained at the outset of this article, the remaining maritime boundary for Korea to resolve with Japan lies in the East Sea (or Sea of Japan), and the East China Sea, except for the southern part of the continental shelf of the East Sea of Korea.⁷¹ In this context, could we anticipate that these maritime boundary disputes would be resolved through compulsory conciliation under UNCLOS? The requirements for resort to compulsory conciliation prompt a number of challenges for either Korea or Japan to rely on this dispute settlement procedure.

First, there is an immediate point of contrast in the situation between Korea and Japan as compared to Timor-Leste and Australia. In the latter dispute, there was no contested territory between the parties. As indicated above, a dispute submitted for conciliation cannot involve “concurrent consideration of any unsettled dispute concerning sovereignty or other rights over continental or insular land territory.”⁷² For Korea and Japan, this clause limits the scope of a dispute and may prevent conciliation being used for the resolution of any maritime boundary dispute around Dokdo.

Professor Oxman has suggested, however, that if two states seeking to delimit their maritime boundary also dispute sovereignty over particular territory, the boundary could still be drawn to the extent that the disputed territory would not influence the delimitation.⁷³ In this regard, a maritime boundary could only be delimited if the presence of Dokdo does not influence what line is to be drawn.⁷⁴ However, Japan may not wish to back down from its position that Dokdo is entitled to its own EEZ and continental shelf as this precedent would be prejudicial to Japan’s claims to island status over other features, such as Okinotorishima. If Dokdo was to generate an EEZ and continental shelf, it would be less likely that any delimitation in the East Sea could be pursued because of the influence of those maritime zones on any potential boundary.

Second, a further condition for resort to conciliation is that the dispute must be one that has arisen subsequent to the entry into force of UNCLOS between the parties to the dispute.⁷⁵ This condition significantly reduces the number of continental shelf delimitations that could have been subject to the Convention’s dispute settlement regime.⁷⁶ Notably, prior to the entry into force of the Convention, each state had challenged the other state’s claim to sovereignty over Dokdo.⁷⁷ The conclusion of the bilateral continental shelf agreement in 1974 indicates that disputed sovereignty over Dokdo was already considered prejudicial to the resolution of a continental shelf boundary at that time.

The same considerations may not hold true in relation to any dispute concerning the delimitation of the overlapping EEZs. Korea and Japan both declared an EEZ in 1996. As such, a dispute as to overlapping EEZs could only have arisen after UNCLOS had entered into force. Although Japan and Korea had concluded a fisheries agreement in 1965, this agreement did not address all the rights and duties ultimately incorporated into the EEZ regime under UNCLOS. On this basis, there may be an

opportunity to pursue compulsory conciliation over the delimitation of the EEZ if states only declared these zones subsequent to the entry into force of UNCLOS. Such a tactic may be of interest where the coastal states concerned have a strong interest in the conservation and management of the marine living resources, as is the case with Korea and Japan.

A third precondition for compulsory conciliation considers whether any agreement has been reached within a reasonable period of time in negotiations between the parties. This assessment involves a factual determination as to the diplomatic exchanges between the parties. Korea and Japan have largely been stalemated in efforts to resolve the maritime boundary definitively because of the Dokdo dispute. Nonetheless, the obligation to undertake efforts to negotiate the maritime boundary was recognized in their 1998 fisheries agreement. Notably, Article 1 of Annex I, which is an integral part of the 1998 agreement,⁷⁸ provides for the two states to continue negotiating in good faith for a prompt delimitation of their EEZs.

This obligation in the Japan-Korea Fisheries Agreement further underlines a response to a fourth precondition for compulsory conciliation, namely that conciliation is not available where the sea boundary dispute has been “finally settled by an arrangement between the parties.”⁷⁹ The Japan-Korea Fisheries Agreement clearly reflects a provisional, not final, arrangement between the parties and commentators consider it consistent with an obligation under Article 74(3) to enter into provisional arrangements of a practical nature pending the final resolution of a maritime boundary for overlapping EEZs.⁸⁰

Fifth, compulsory conciliation is not available for any dispute that “is to be settled in accordance with a bilateral or multilateral agreement binding upon those parties.”⁸¹ The Japan-Korea Fisheries Agreement has a detailed dispute settlement clause in Article XIII. This provision anticipates dispute settlement to involve consultations in first instance and then allows for the possibility of arbitration if mutually agreed. Implicit in this agreement is that if one state refuses to arbitrate then arbitration cannot proceed.⁸²

In relation to the Japan-Korea Fisheries Agreement, the dispute settlement clause in this treaty is very similar to the dispute settlement clause in the Convention for the Conservation of Southern Bluefin Tuna.⁸³ In 1999, Australia and New Zealand instituted proceedings against Japan under UNCLOS, challenging the legality of Japan’s experimental fishing program. The arbitral tribunal held that Australia and New Zealand were precluded from bringing claims against Japan under UNCLOS because the Convention for the Conservation of Southern Bluefin Tuna had its own dispute settlement clause that fell within Article 281.⁸⁴ On this basis, disputes relating to matters that fall within the Japan-Korea Fisheries Agreement should also be resolved only through the dispute settlement regime in that bilateral treaty, and would not be subject to compulsory proceedings under UNCLOS. However, more recently, the *South China Sea* Tribunal took a contrary view and considered that “the better view is that Article 281 requires some clear statement of exclusion of further procedures.”⁸⁵ The Tribunal remarked that this “requires an ‘opting out’ of Part XV procedures.”⁸⁶

If the view of the *South China Sea* Tribunal is followed, the Japan-Korea Fisheries Agreement would be interpreted as not expressly excluding UNCLOS dispute settlement. The references to UNCLOS in the Preamble of the Japan-Korea Fisheries Agreement, including that the “new fisheries order” is to be “based on the UNCLOS,” could be interpreted as signaling the inclusion of the UNCLOS dispute settlement regime.⁸⁷ At its highest, it is implicit in the Japan-Korea Fisheries Agreement that the dispute settlement regime in Article XIII was intended as the means to resolve disputes between the parties relating to the interpretation and application of that agreement. This point would be underlined by the deliberate decision to move away from compulsory arbitration, as had been included in the 1965 agreement, indicating the parties’ preference not to use compulsory procedures as the method to resolve their disputes. However, the failure in this agreement, adopted in 1998 and hence well after the adoption and entry into force of UNCLOS, to exclude explicitly UNCLOS procedures may mean that Article 281 is not applicable to exclude jurisdiction if one follows the views of the *South China Sea* Tribunal. If Korea wished to prevent the exercise of UNCLOS jurisdiction in a case instituted by Japan, Korea would have the strategic advantage in being able to use Japan’s own arguments from the *Southern Bluefin Tuna* arbitration against it.

Nonetheless, it should also be noted that the Japan-Korea Fisheries Agreement sets out that “No provision of this Agreement shall be deemed to prejudice the position of either Contracting State on questions of international law other than those relating to fisheries.”⁸⁸ It could then be argued that this Article limits the application of the Agreement only to questions relating to fisheries. As such, the Japan-Korea Fisheries Agreement, including its dispute settlement clause, does not cover disputes relating to other maritime activities, such as the delimitation of the maritime boundary. In sum, on the present status of the law, it is likely that a commission would consider that this precondition had been satisfied. On the basis of this analysis, compulsory conciliation could proceed in relation to the EEZ maritime boundary only to the extent that any maritime entitlements of Dokdo do not affect that boundary.

Ultimately, it should be borne in mind that even if the UNCLOS dispute settlement procedures are not available for delimiting a boundary between Korea and Japan, they might still be utilized to resolve other maritime disputes that may arise between the two states because of the contested sovereignty over Dokdo and the undelimited maritime area. For example, either state may challenge the fishing or maritime scientific research activities of the other state in this area. Depending on the exact factual scenario, a fishing or research dispute may be excluded from compulsory arbitration or adjudication under Article 297 if it concerns the exercise of coastal state rights in the EEZ. However, to determine if a claim of an UNCLOS violation may be substantiated, a court or tribunal under UNCLOS may consider that resolving the territorial sovereignty dispute over Dokdo is incidental to the dispute presented for resolution. This position might align with the holding in the *Chagos Archipelago* arbitration.⁸⁹ It remains unclear what a “minor” issue of territorial sovereignty might be, although Professor Tanaka has suggested it would most likely

concern a question over a low-tide elevation.⁹⁰ It seems unlikely that the Dokdo dispute would be considered minor when there is such national importance attached to each claim and the features themselves. Moreover, their near mid-sea location indicates the significance of any finding of territorial sovereignty for either of the claimant states.

If it was in their interest to do so, either Korea or Japan could seek a determination on the maritime entitlements of Dokdo under Article 121 of UNCLOS. The Philippines sought a determination in the *South China Sea* arbitration as to whether various features in the South China Sea were low-tide elevations, rocks or islands. Under Article 121(3) of UNCLOS, rocks that cannot sustain human habitation or an economic life of their own will not be accorded an EEZ or a continental shelf. States may only claim entitlements to such maritime zones from islands. Such a dispute would fall within the jurisdiction of a court or tribunal constituted under UNCLOS in light of the *South China Sea* Tribunal's ruling that a determination of maritime entitlements is not part of a maritime boundary delimitation excluded under Article 298(1)(a).⁹¹ If Dokdo was considered "rocks," the contested sovereignty would have much less of an impact on the maritime area to be delimited and thus provide a conciliation commission with scope to function. In this situation, if there remained an undelimited area not influenced by the question of sovereignty over Dokdo, it is unlikely that the other preconditions for compulsory conciliation would pose much of a barrier to consideration of the EEZ maritime boundary.

Resort to compulsory conciliation is therefore not straight-forward given the continued challenges to sovereignty over Dokdo and questions as to their status as "rocks" or "islands" under Article 121 of the Convention. It may only be in the interests of one of the states to seek this form of resolution if fisheries disputes have escalated between the parties and negotiations are unable to settle their differences.

Maritime Boundary Dispute Between Korea and China

Similarly to the situation between Korea and Japan, Korea and China have also sought to devise provisional arrangements rather than finally resolving their maritime boundary in the Yellow Sea. Final resolution has been difficult because "the Yellow Sea is rich in natural resources, with the capacity for year-round fishing and an estimated oil reserve that may contain up to ten billion barrels of oil."⁹² At present, there are overlapping EEZs and continental shelves claimed by both states. Although the final boundary has not been determined, both states entered into a provisional maritime boundary arrangement by way of a 1998 Fisheries Agreement.⁹³ This agreement recognizes coastal EEZ areas where each country can exercise exclusive sovereign rights, a joint fishing area where each state has equal rights, and transitional areas extending from the joint fishing area.⁹⁴

Beyond the economic interests at stake, several legal challenges exist in resolving the maritime boundary between Korea and China. First, the system of straight base-

lines claimed by China is disputed, with over half of the 48 segments claimed being in excess of 24 nautical miles in length, and three exceeding 100 nautical miles in length.⁹⁵ The use of straight baselines does not conform with the geographic coastline of China, which Professor Kim has described as essentially smooth, with no fringing islands, from the Shandong Peninsula to the area around Shanghai.⁹⁶ Similarly, China's coastline south of the Yangtze estuary has been described as deeply indented, whereas the coastline north of that point is more regular and inconsistent with the use of straight baselines.⁹⁷

Second, China's claim that Bohai Bay is a historic bay has been controversial. The distance between the headlands is 55 nautical miles,⁹⁸ and the mouth is 45 nautical miles long,⁹⁹ which does not comply with the definition of a juridical bay under UNCLOS.¹⁰⁰ While China has argued that the small islands scattered across the mouth of the Bay strengthen its claim, Korea has never acknowledged the legitimacy of this claim and Japan has expressly raised reservations.¹⁰¹

Third, China's use of Dong-dao (described as a barren islet, approximately 70 nautical miles from the coast) as a base point for its baselines arguably lacks conformity with UNCLOS.¹⁰²

Finally, the relevance of Ieodo, a submerged reef without any entitlement to maritime zones under Article 13 or Article 121 of UNCLOS, has proven tendentious between Korea and China.¹⁰³

Each of these disputes could be resolved through arbitration or adjudication under UNCLOS because they concern the interpretation or application of provisions of the Convention other than Articles 15, 74 and 83. It is only delimitation under these provisions that is excluded from compulsory procedures entailing binding decisions. Korea could therefore resort to a court or tribunal for resolution of these questions as a means to facilitate the overall discussion of the maritime boundary dispute.

Compared to the situation between Korea and Japan, satisfying the preconditions for compulsory conciliation between Korea and China should be attainable. First, there are no outstanding territorial disputes between Korea and China. Although China has raised objections to Korea's actions around Ieodo, no sovereignty claim is sustainable over a submerged reef.¹⁰⁴ Second, although Korea and China disputed their continental shelf boundaries prior to 1994, when UNCLOS entered into force, Korea declared its EEZ in 1996 whereas China declared its EEZ in 1998.¹⁰⁵ As such, a dispute as to the delimitation of the EEZ arose subsequent to the entry into force of the Convention. Third, it must be asked whether any agreement has been reached within a reasonable period of time in negotiations between the parties. Negotiations have been ongoing since the fisheries agreement was concluded, and it would be possible for one of the parties to conclude that no further progress was possible through negotiations.¹⁰⁶

Fourth, Korea would need to show that conciliation is available because the sea boundary dispute has not been "finally settled by an arrangement between the parties."¹⁰⁷ The Korea-China Agreement is similar to the Japan-Korea Fisheries Agreement in that both are intended as provisional arrangements pending the final

settlement of their maritime boundaries. Moreover, the Korea-China Agreement sets out that “No provisions of the present Agreement may be deemed prejudicial to the position of either Contracting Party with regard to its maritime jurisdiction.”¹⁰⁸ The meaning of this provision is obtuse on its face. Given that the Korea-China Agreement is intended to regulate fisheries activities pending resolution of the EEZ boundary, the implication must be that the claims to maritime areas that would typically be made as part of a delimitation are not to be prejudiced by the agreements reached on temporary zones within this bilateral agreement.

The final precondition is that compulsory conciliation of a maritime boundary dispute under the Convention is not available for any dispute that “is to be settled in accordance with a bilateral or multilateral agreement binding upon those parties.”¹⁰⁹ The Korea-China Agreement does not include a dispute settlement clause. At most, any dispute concerning the interpretation or application of the Korea-China Agreement could be raised before the Korea-China Joint Fisheries Commission established under Article 13, which has the task of “[s]tudy[ing] the implementation of the present Agreement and other issues relating to the Agreement.”¹¹⁰ The representatives of both Korea and China must unanimously agree upon any recommendations or decisions of the Commission.¹¹¹ If disputes arose under that Agreement and those disputes fell within the interpretation or application of UNCLOS, the absence of a dispute settlement clause in the Korea-China Agreement would mean that Article 281 does not preclude jurisdiction.

Korea or China therefore has a clear legal option of referring the outstanding maritime boundary dispute in the Yellow Sea to compulsory conciliation under Article 298(1)(a)(i) of UNCLOS if desired.

Concluding Remarks

Analysis of the Japan-Korea and China-Korea maritime boundary disputes highlights the legal questions and requirements for any of these states to pursue compulsory conciliation under UNCLOS. There will also be political considerations at stake, particularly whether any of the states wishes to engage a third-party in seeking to resolve these disputes. A notable feature of the conciliation between Timor-Leste and Australia is that it was the preferred mechanism of the less powerful state in facing a more powerful state. A similar phenomenon may be seen in other cases instituted under UNCLOS, including the Philippines’ arbitration against China, the challenge of Mauritius to the United Kingdom’s actions in relation to the Chagos Archipelago, and even the Netherlands pursuit of claims against Russia for its actions against the Greenpeace vessel the *Arctic Sunrise*.¹¹² This dynamic may be more pertinent to Korea instituting proceedings against China, as opposed to the relationship between Korea and Japan.

States will always weigh up a range of factors in determining how to resolve their boundary disputes, especially considering the national importance of defining the limits of a state’s sovereignty and its sovereign rights over maritime areas. Ulti-

mately, if negotiations are progressing poorly from one state's perspective, it may consider compulsory conciliation a preferred alternative that will advance discussions without being as confrontational or legally binding as arbitration or adjudication. The importance of Timor-Leste's actions in instituting conciliation is a strong reminder that another option might exist for states in contemplating what procedures or tactics to utilize in seeking the determination of their maritime boundaries.

There are two other important lessons from the *Timor Sea Conciliation* from a legal perspective. The first is the determination that compulsory conciliation is available for maritime boundary disputes arising subsequent to the entry into force of UNCLOS—that is, 1994. For every state party that declared its EEZ after the entry into force of the Convention, their EEZ maritime boundaries may be subject to conciliation under Article 298(1)(a)(i) if otherwise excluded from arbitration or adjudication. This date applies even to those states, like Timor-Leste, that only became parties to UNCLOS after 1994.

The second important lesson is the reaffirmation of an ongoing trend in compulsory dispute settlement under UNCLOS. Namely, the existence of another agreement between the parties purporting to address a particular maritime matter is unlikely to constitute any sort of barrier for one of the parties turning to UNCLOS dispute settlement instead. It is remarkable that the *Timor Sea Conciliation* Commission considered that it did not need to concern itself with the treaty violation perpetrated by Timor-Leste under the CMATS Treaty in instituting proceedings under UNCLOS against Australia in relation to the maritime boundary. While there may be a discernible trend to promote the international legal order of the oceans as enshrined in UNCLOS,¹¹³ it is worth asking whether that legal order is truly supported when other maritime agreements between states are disregarded.

The *Timor Sea Conciliation* process has demonstrated the flexibility that may be afforded to the parties, as well as to a conciliation commission, in exploring diverse options so as to arrive at an amicable settlement.¹¹⁴ Each of the parties in the *Timor Sea Conciliation* demonstrated a willingness to engage fully in the discussions and saw political advantages in resolving this dispute. For Timor-Leste, this process would ensure the long-sought establishment and recognition of Timor-Leste's independent and sovereign rights over both its land and maritime territory. For Australia, it acknowledged “the stability and prosperity of its regional neighbors as matters of high importance and very much in Australia's interest.”¹¹⁵ In addition, the Commissioners also appeared to have the requisite skills to manage this process: as noted in the Report, “trying combinations at different stages of the process.”¹¹⁶ It might be the case that extant conditions for the *Timor Sea Conciliation* may be too unique to expect replication in other settings. The full success of the *Timor Sea Conciliation* will only be realized when the Treaty on Maritime Boundaries is ratified by both states and there is a decision on the development concept for Greater Sunrise. At the very least, however, it is important for states to take options like compulsory conciliation more seriously now in devising strategies for the successful delimitation of their maritime areas.

Notes

1. *Timor-Leste v. Australia Conciliation*, Decision on Australia's Objections to Competence (19 September 2016), <https://pcacases.com/web/view/132> (hereinafter *Timor Sea Conciliation—Competence*).
2. United Nations Convention on the Law of the Sea (Montego Bay, 10 December 1982, in force 16 November 1994) 1833 UNTS 396 (hereinafter UNCLOS).
3. UNCLOS, Art 298(1)(a)(i).
4. *In the Matter of the Maritime Boundary Between Timor-Leste and Australia (The “Timor Sea Conciliation”)*, Report and Recommendations of the Compulsory Conciliation Commission Between Timor-Leste and Australia on the Timor Sea, PCA Case No. 2016-10, 9 May 2018, available at: <https://pcacases.com/web/sendAttach/2327> (hereinafter *Timor Sea Conciliation—Report*).
5. See, e.g., Alan E. Boyle, “Dispute Settlement and the Law of the Sea Convention: Problems of Fragmentation and Jurisdiction,” *International and Comparative Law Quarterly* 46 (1997), p. 38.
6. The maritime boundary disputes that may be excluded concern the delimitation of the territorial sea under Article 15 of the Convention, the delimitation of overlapping Exclusive Economic Zones (EEZ) under Article 74 and the delimitation of overlapping continental shelves under Article 83.
7. See “United Nations Convention on the Law of the Sea: Declarations made upon signature, ratification, accession or succession or anytime thereafter,” http://www.un.org/depts/los/convention_agreements/convention_declarations.htm#RepKorea, accessed November 2, 2018. Disputes concerning the Northern Limit Line between North Korea and South Korea cannot be resolved under the UNCLOS dispute settlement regime because North Korea is not a party to UNCLOS.
8. Weiqiang Zhang, “A Study on the Delimitation of the Sea of Japan,” *China Oceans Law Review* (2015), p. 374.
9. *Ibid.*; Jon M Van Dyke, “The Republic of Korea’s Maritime Boundaries,” *International Journal of Marine and Coastal Law* 18 (2003), pp. 520–521.
10. *Agreement Between Japan and the Republic of Korea Concerning the Establishment of Boundary in the Northern Part of the Continental Shelf Adjacent to the Two Countries*, Japan-Republic of Korea, signed 30 January 1974, 1225 UNTS 104 (entered into force 22 June 1978).
11. Van Dyke, above n9, 523.
12. *Agreement Between Japan and the Republic of Korea Concerning Fisheries*, Japan-Republic of Korea, signed 28 November 1998, 2731 UNTS 305 (entered into force 22 January 1999) Annex II (hereinafter Japan-Korea Fisheries Agreement).
13. *Agreement Between Japan and the Republic of Korea Concerning Joint Development of the Southern Part of the Continental Shelf Adjacent to the Two Countries*, Japan-Republic of Korea, signed 30 January 1974, 1225 UNTS 114 (entered into force 22 June 1978).
14. *Fisheries Agreement Between the Government of the Republic of Korea and the Government of the People’s Republic of China*, Korea-China, signed 3 August 2000, 2486 UNTS 233 (entered into force 30 June 2001) (hereinafter China-Korea Fisheries Agreement).
15. Zhang, above n8, p. 378; Van Dyke, above n9, p. 523.
16. Similar to Korea, China has also issued a declaration excluding maritime boundary disputes from compulsory procedures entailing a binding decision. See “United Nations Convention on the Law of the Sea: Declarations made upon signature, ratification, accession or succession or anytime thereafter,” http://www.un.org/depts/los/convention_agreements/convention_declarations.htm#China after ratification
17. UNCLOS, Art 283, accessed November 2, 2018.
18. The meaning of Article 281 has already been analysed in arbitrations and most recently, narrowed in its application to increase the likelihood of arbitration or adjudication under UNCLOS. See *South China Sea Arbitration (The Republic of Philippines v. The People’s Republic of China)*, Award on Jurisdiction and Admissibility (29 October 2015), PCA Case No. 2013–19, <http://www.pcacases.com/web/view/7> (hereinafter “*South China Sea (Jurisdiction)*”), paras. 223–224, accessed November 2, 2018. See also Natalie Klein, “The Vicissitudes of Dispute Settlement Under the Law of the Sea Convention,” *International Journal of Marine and Coastal Law* 32 (2017), pp. 337–339.

19. For example, the breadth of topics that could fall for consideration under UNCLOS is seen in the *South China Sea Award*. *South China Sea Arbitration (The Republic of Philippines v. The People's Republic of China)*, Award (12 July 2016), PCA Case No. 2013–19, available at <http://www.pcacases.com/web/view/7> (hereinafter “*South China Sea [Final Award]*”), accessed November 2, 2018. It addressed *inter alia* low-tide elevations, rocks, islands, artificial islands and installations, protection and preservation of the marine environment, fishing in the EEZ, traditional fishing, law enforcement, safety of navigation and historic rights.

20. See, e.g., Irina Buga, “Territorial Sovereignty Issues in Maritime Disputes: A Jurisdictional Dilemma for Law of the Sea Tribunals,” *International Journal of Marine and Coastal Law* 27 (2012), p. 59, <https://doi.org/10.1163/157180812X615113>.

21. *Chagos Marine Protected Area Arbitration (Mauritius v. United Kingdom)*, Award (18 March 2015), <https://www.pcacases.com/web/view/11> (hereinafter “*Chagos Archipelago*”), accessed November 2, 2018.

22. UNCLOS, Art 298(1)(a)(i).

23. Resolution, International Conciliation, 49(II) *Annuaire de l'Institut de droit international* (1961), 386, Article 1, cited in Sienho Yee, “Conciliation and the 1982 UN Convention on the Law of the Sea,” *Ocean Development and International Law* 44 (2013), p. 315.

24. See J.G. Merrills, *International Dispute Settlement* (Cambridge: Cambridge University Press, 5th ed., 2011), p. 65.

25. UNCLOS Annex V, Art 13.

26. UNCLOS, Art 298(1)(a)(i).

27. UNCLOS, Art 298(1)(a)(iii).

28. UNCLOS Annex V, Art 3 and 4, which apply to compulsory conciliation by virtue of UNCLOS Annex V, Art 14.

29. UNCLOS Annex V, Art 6.

30. The timing is relative to the length of time that may be typically taken for an arbitration or adjudication, which usually span several years.

31. UNCLOS Annex V, Art 7(1).

32. *Ibid.*

33. UNCLOS, Art 298(1)(a)(ii).

34. For a discussion of the contentious relationship between Australia and Timor-Leste, see David Dixon, “Kangaroos and Crocodiles: The Timor Sea Treaty of 2018 (January 1, 2018),” *UNSW Law Research Paper No. 18–42*, available at SSRN: <https://ssrn.com/abstract=3211714> or <http://dx.doi.org/10.2139/ssrn.3211714>.

35. The Greater Sunrise fields in the Timor Sea have an estimated value of AUD\$40 billion. See Rebecca Strating, “What’s Behind Timor-Leste Terminating Its Maritime Treaty with Australia?,” *The Conversation*, 10 January 2017, <https://theconversation.com/whats-behind-timor-leste-terminating-its-maritime-treaty-with-australia-71002>.

36. Timor Sea Treaty Between the Government of East Timor and the Government of Australia (Dili, 20 May 2002, in force 2 April 2003) [2003] *ATS* 13.

37. Treaty on Certain Maritime Arrangements in the Timor Sea (Sydney, 12 January 2006, in force 23 February 2007) [2007] *ATS* 12 (hereinafter *CMATS Treaty*). For discussion of this treaty and its predecessors, see Warwick Gullett, “Reconciliation in the Timor Sea: Progress by Australia and Timor Leste Towards Amicable Development of Offshore Resources,” *Korean Journal of International and Comparative Law* 4 (2016), pp. 99, 103–107.

38. Timor Sea Treaty, Art 3.

39. *CMATS Treaty*, Art 4.

40. *Timor Sea Conciliation—Competence*, paras. 91–92.

41. *Ibid.*, para. 62. But see also Klein, above *n*18, pp. 339–340 (questioning the logic of this finding); Peter Tzeng, “The Peaceful Non-Settlement of Disputes: Article 4 of *CMATS* in Timor-Leste v. Australia,” *Melbourne Journal of International Law* 18 (2017), pp. 349, 363; Jianjun Gao, “The Timor Sea Conciliation (Timor-Leste v Australia): A Note on the Commission’s Decision on Competence,” *Ocean Development and International Law* 49 (2018), pp. 208, 218.

42. *Timor Sea Conciliation—Competence*, para. 74.

43. *Ibid.*, para. 82.

44. Joint Statement by the Governments of Timor-Leste and Australia and the Conciliation

Commission Constituted Pursuant to Annex V of the United Nations Convention on the Law of the Sea, 24 January 2017, <http://dfat.gov.au/news/media-releases/Pages/joint-statement-by-the-governments-of-timor-leste-and-australia-and-the-conciliation-commission.aspx> (hereinafter Joint Statement of 24 January).

45. See *Timor Sea Conciliation—Report*, paras. 287–289 (describing the lack of trust and steps taken by the Commission in response).

46. *Timor Sea Conciliation—Report*, para. 95.

47. Joint Statement of 24 January.

48. *Ibid.*

49. Donald R Rothwell, “2018 Timor Sea Treaty: A New Dawn in Relations Between Australia and Timor-Leste?,” *Law Society Journal* 44 (May 2018), pp. 70, 72.

50. *Ibid.* (noting letter written on 20 January 2017).

51. *Ibid.*, and Joint Statement by the Governments of Timor-Leste and Australia and the Conciliation Commission Constituted Pursuant to Annex V of the United Nations Convention on the Law of the Sea, 9 January 2017, http://foreignminister.gov.au/releases/Pages/2017/jb_mr_170109.aspx.

52. *Timor Sea Conciliation—Report*, para. 286 (referring to “sustained, informal contacts with the Parties’ representatives and counsel at a variety of different levels”).

53. *Ibid.*, para. 58.

54. “In practice, most of the Commission’s meetings with the Parties were held separately, and the Commission considers that its most important discussions with each Party would not have occurred in a joint setting.” *Ibid.*, para. 57.

55. See *ibid.*, para. 59 (describing the mechanisms put in place in this regard).

56. See *ibid.*, para. 60.

57. “In the Commission’s view, these proceedings truly became productive at the point at which both Parties became convinced that the Commission’s objective was not to push them to abandon long-held positions, but rather to understand and assist the Parties to identify a solution they had been unable to reach themselves.” *Ibid.*, para. 290.

58. *Ibid.*, para. 90. It appears that some short written submissions were requested in relation to each sides’ views on the maritime boundary. See *ibid.*, para. 95 and 290. Written responses to the Commission’s non-paper were also sought. *Ibid.*, para. 117.

59. See, e.g., *ibid.*, para. 124 and para. 216.

60. Merrills, above *n*24, p. 26.

61. UNCLOS Annex V, Art 5. See also Yee, above *n*23, p. 320.

62. Treaty between Australia and the Democratic Republic of Timor-Leste establishing their Maritime Boundaries in the Timor Sea, signed 6 March 2018 [2018] ATNIF 4. For a detailed discussion of this Treaty, see Nigel Bankes, “Settling the Maritime Boundaries Between Timor-Leste and Australia in the Timor Sea,” *Journal of World Energy Law and Business* 11 (2018), pp. 387, 395–405.

63. See *Timor Sea Conciliation—Report*, paras. 261–264. See further Rothwell, above *n*49, 71–72.

64. See “Presentation for Timor-Leste’s Opening Statement,” 29 August 2016, TL-21, *Timor Sea Conciliation*, available at <https://pcacases.com/web/sendAttach/1887>.

65. See *Timor Sea Conciliation—Report*, para. 241.

66. “Timor-Leste and Australia continue engagement with Greater Sunrise Joint Venture and agree timeframe for signature of maritime boundary treaty,” Press Release, 26 December 2017, available at <https://pca-cpa.org/wp-content/uploads/sites/175/2017/12/20171226-Press-Release-No-12-EN.pdf>. Accessed November 2, 2018.

67. *Timor Sea Conciliation—Report*, para. 216. These are included in Annex 28 to the Report. The Commission also proposed framework agreements for the parties, but these were not included in the published Report. *Ibid.*

68. *Ibid.*, para. 306.

69. “Mediation is a method of peaceful settlement of an international dispute where a third party intervenes to reconcile the claims of the contending parties and to advance his own proposals aimed at a mutually acceptable compromise solution.” United Nations, *Handbook on the Peaceful Settlement of Disputes* (1992) 40. Strating has commented, “It appears that the single most impor-

tant aspect in dispute resolution has been the conciliation process itself, the mentality of both parties to act in 'good faith' and the role of the conciliators in mediating between the parties." Rebecca Strating, "Maritime Territorialization, UNCLOS and the Timor Sea Dispute," *Contemporary South-east Asia* 40 (2018), pp. 101, 117–118.

70. *Timor Sea Conciliation—Report*, para. 285.

71. For discussion see Seokwoo Lee and Hee Eun Lee, *The Making of International Law in Korea: From Colony to Asian Power* (Leiden: Brill Nijhoff, 2016), pp. 252–253.

72. UNCLOS, Art 298(1)(a)(i).

73. See Bernard H. Oxman, "International Maritime Boundaries: Political, Strategic, and Historical Considerations," *University of Miami Inter-American Law Review* 26 (1994–95), p. 268.

74. Japan and Korea's agreed continental shelf boundary currently stops at the point that Dokdo could influence any boundary line. See discussion in Van Dyke, above *n*9, p. 523.

75. Natalie Klein, *Dispute Settlement in the UN Convention on the Law of the Sea* (Cambridge: Cambridge University Press, 2005), pp. 257–258.

76. Eero J. Manner, "Settlement of Sea-Boundary Delimitation Disputes According to the Provisions of the 1982 Law of the Sea Convention" in Jerzy Makarczyk (ed.), *Essays in International Law in Honour of Judge Manfred Lachs* (Leiden: Martinus Nijhoff, 1984), p. 642.

77. It could be argued the dispute was sparked shortly after the adoption of the 1951 San Francisco Peace Treaty when Korea declared its maritime zones pursuant to the Rhee Line, which included maritime zones for Dokdo. Japan has suggested that the critical date for the sovereignty dispute would be 1954 when it sought to refer the dispute to the ICJ for resolution. However, Professor van Dyke has argued that the ICJ would be unlikely to ignore events that occurred after that date and that the critical date could not be set with any certainty. Jon M. Van Dyke, "Legal Issues Related to Sovereignty Over Dokdo and Its Maritime Boundary," *Ocean Development and International Law* 38 (2007), p. 164.

78. Japan-Korea Fisheries Agreement, Art XIV.

79. UNCLOS, Art 298(1)(a)(iii).

80. See, e.g., Sun Pyo Kim, "The UNCLOS Convention and New Fisheries Agreement in North East Asia," *Marine Policy* 27 (2003), p. 99.

81. UNCLOS, Art 298(1)(a)(iii).

82. This provision reflects a shift from the 1965 fisheries agreement between Korea and Japan, which did provide for compulsory arbitration. Agreement between Japan and the Republic of Korea on Fisheries, Japan-Korea, signed 22 June 1965, 583 UNTS 8472 (entered into force 18 December 1965), art IX.

83. Convention for the Conservation of Southern Bluefin Tuna, signed 10 May 1993, 1819 UNTS 359 (entered into force 20 May 1994), Art 16

84. *Southern Bluefin Tuna Cases—Australia and New Zealand v. Japan, Award on Jurisdiction and Admissibility (Australia v Japan; New Zealand v Japan)* (Arbitral Tribunal constituted under Annex VII of the United Nations Convention on the Law of the Sea, Aug. 4, 2000) (2000) 39 ILM 1359.

85. *South China Sea (Jurisdiction)*, para. 223.

86. *Ibid.*, para. 224.

87. The Tribunal in *South China Sea* interpreted references to UNCLOS in this way in assessing different bilateral instruments. See *South China Sea (Jurisdiction)*, para. 246.

88. Japan-Korea Fisheries Agreement, Art XV.

89. *Chagos Archipelago*, para. 221.

90. Yoshifumi Tanaka, "Reflections on the *Philippines/China* Arbitration: Award on Jurisdiction and Admissibility," *The Law and Practice of International Courts and Tribunals* 15 (2016), p. 319, <https://doi.org/10.1163/15718034-12341324>.

91. *South China Sea (Jurisdiction)*, para. 156. But see Klein, above *n*18, pp. 354–355.

92. Lee & Lee, above *n*69, p. 252.

93. China-Korea Fisheries Agreement, above *n*14.

94. *Ibid.*, Art 7 and Art 8.

95. Suk Kyoon Kim, "Understanding Maritime Disputes in Northeast Asia: Issues and Nature," *International Journal of Marine and Coastal Law* 23 (2008), p. 216.

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97. Van Dyke, above *n*9, pp. 517–518.
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99. Kim, above *n*93, p. 217.
100. UNCLOS, Art 7.
101. Van Dyke, above *n*9, p. 521.
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107. UNCLOS, Art 298(1)(a)(iii).
108. China-Korea Fisheries Agreement, Art 14.
109. UNCLOS, Art 298(1)(a)(iii).
110. China-Korea Fisheries Agreement, Art 13(2)(4).
111. *Ibid.*, Art 13(3).
112. *Arctic Sunrise Arbitration (Netherlands v. Russia)*, Award on the Merits (14 August 2015), <http://www.pcacases.com/web/view/21>, accessed November 2, 2018.
113. Tanaka, above *n*88, pp. 323–324.
114. The Commission’s Report referred to “the flexible pragmatism that lies at the heart of conciliation.” *Timor Sea Conciliation—Report*, para. 62.
115. *Ibid.*, para. 50. See also “Opening Session Transcript” 29 August 2016, *Timor Sea Conciliation*, available at: <https://pcacases.com/web/sendAttach/1889>.
116. *Timor Sea Conciliation—Report*, para. 294.

Biographical Information

Natalie Klein is a professor at UNSW Sydney, Faculty of Law, Australia. She was previously at Macquarie University where she served as the dean of Macquarie Law School (2011–2017), as well as Acting Head of the Department for Policing, Intelligence and Counter-Terrorism (2013–2014). Professor Klein teaches and researches in different areas of international law, focusing on law of the sea and international dispute settlement. Her masters and doctorate were awarded from Yale Law School and she is a Fellow of the Australian Academy of Law.

Crimes Within Crimes in Somalia: Double-Dealing Pirates, Fraudulent Negotiators, Duplicitous Intermediaries and Treacherous Illegal Fishers

Awet Tewelde Weldemichael

Structured Abstract

Article Type: Research Paper

Purpose—The oft-romanticized view of the Indian Ocean region glosses over the physical and systemic violence that dots its history. This paper illustrates the said point through a broad analysis of the crimes of illegal fishing and maritime piracy off the coast of Somalia, and specific examination of the tragic case of three Thai fishing boats that Somali pirates captured in mid-April 2010.

Design, Methodology, Approach—By drawing on existing secondary material—from media coverage, scholarly analyses and industry and policy reports—and extensive ethnographic research on the ground in pirate-affected parts of Somalia, this paper documents the dynamics of illegal fishing, piracy, and associated criminalities. Several open-ended interviews (some of which were repeated) and less formal consultations were particularly useful in piecing together the story.

Findings—By revealing the physical and systemic violence of the specific case, this paper encapsulates aspects of the violent start to the 21st century in parts of the Indian Ocean region. It also reveals the inner workings of piracy, ransom negotiations and the consequences of deception and breakdown of “trust” even in the criminal world of the predatory enterprise of piracy.

49 Bader Lane, Watson Hall, Queen’s University, Kingston, Ontario, Canada,
K7L 3N6; email: awet.tewelde@gmail.com; Tel: +1(613)5336000, ext. 74370;
Fax: +1(613)5336298



Journal of Territorial and Maritime Studies / Volume 6, Number 1 / Winter/Spring 2019 / pp. 51–63 /
ISSN 2288-6834 (Print) / © 2018 Yonsei University

Practical Implications—This paper brings to light previously unknown facts about the tragedy of Thai triplet vessels, *Prantalay 11, 12 and 14*, and their sailors. Emblematic of many similar cases of illegal fishing and captivity in pirate hands in Somalia, the paper emphasizes the layered dangers of the criminalities in the region.

Originality, Value—The conflict in Somalia continues to make the country inaccessible to foreign researchers and makes it especially difficult to research maritime piracy. This paper is one of very few to bring data from extensive interviews with former pirates, fishermen, government and security officials, and members of the local communities from the ground to document the broad framework of the phenomenon, and the specific tragedy that befell the Thai vessels and their sailors as an example of the violence of illegal fishing and piracy.

Keywords: IUU fishing, motherships, piracy, *Prantalay* vessels, PT Interfisheries, Somalia, Thailand

Introduction

The historic sinews of African-Asian ties, especially those which take place in and across the vast Indian Ocean are often romanticized. Although the claim that European commercial and imperial intrusion turned the region into “a site of vulgar power and conquest” is not disputed, the longer and deeper history of maritime predation across the Indian Ocean world renders moot the claim that the region was an arena of “genuine and by and large peaceable exchange” that Shanti Moorthy and Ashraf Jamal say it was.¹ K.N. Chaudhuri best captured the pre-European security dynamics of maritime navigation and the transformation after the advent of European power into the Indian Ocean thus:

The ships belonging to the Karimi merchants, which traded between India and the Red Sea during the pre-Portuguese period, probably carried armed men to offer better protection against pirate attacks. After the Portuguese conquistadores had shown their uncompromisingly hostile intention against the Indian Ocean shipping, the wealthy merchants of maritime Asia began to equip their vessels with European-style naval guns.²

In a short overview of the region’s long history of predation, not only does Edward Alpers similarly document the features of centuries-long African-Asian-European maritime violence in the western Indian Ocean, but he also shows the manifest power relations in the lived experiences with—and the discourse of—the phenomenon.³ Much as the claim about disruptive European intrusion is accurate, therefore, African-Asian relations have not always been a peaceable commercial and cultural interaction and exchange—nor are they anywhere close to that in the 21st century. Illegal fishing and piracy off the coast of Somalia is proof of that fact.

This paper gives a brief overview of illegal, unreported and unregulated (IUU) fishing off the coast of Somalia and its consequences before examining a specific case of IUU fishing vessels to illustrate the cut-throat, exploitative and often violent

aspect of African-Asian relations in the Indian Ocean. The paper also showcases the distrust and double-dealing among the African/Somali actors themselves.

This is the story of three ill-fated Thai fishing vessels (*Prantalay 11*, *Prantalay 12*, and *Prantalay 14*) and their 77 Thai and Burmese sailors. In mid-April 2010, Somali pirates simultaneously captured all three vessels more than 1,000 nautical miles from the Somali coast. As the feuding Somali pirates held the ships and sailors hostage and awaited ransom, duplicitous intermediaries sought to profit by staging a rescue for far less than they collected from the company—with tragic consequences for the hostages. This single story is part of a larger story of maritime predation that my new book examines in greater detail.⁴

State Collapse, Resource Theft and Piracy in Somalia

Following more than a decade of intermittent internecine conflict and progressive state decay, the Somali central government disintegrated in January 1991 with the escape of the military dictator, General Mohamed Siad Barre, from Mogadishu. The subsequent fratricidal war consumed what little remained of the postcolonial state. As Somalia was faltering on land, local fishermen exploited the country's fisheries without proper regulations while foreign corporate interests plundered the country's marine resources and dumped waste with impunity.⁵

Various studies have documented the losses countries like Somalia have faced in the hands of predatory illegal, unreported and unregulated (IUU) fishing. A 2006 study by the High Seas Task Force estimated that between \$4 and \$9 billion were lost annually to IUU fishing.⁶ Three years later, another worldwide study indicated that the monetary value of the losses due to the practice ran between \$10 and \$23 billion.⁷ Conservative estimates indicated that sub-Saharan Africa loses about a quarter of its annual fisheries export, to the order of some \$1 billion.⁸ Somalia's share of this loss is staggering—a 2015 study by Secure Fisheries Project put its annual losses at a little over \$300 million.⁹ Such looting had real life consequences on the Somali people, who took matters into their own hands to protect their interests and livelihoods in the absence of a state government. Various United Nations entities, scholars and independent analysts, and local actors and stakeholders posit that the nexus between hazardous waste dumping and IUU fishing prompted Somali piracy.¹⁰

Some experts reject claims of a causal relationship between IUU fishing and piracy. Stig Hansen, for example, challenges the notion of IUU fishing causing piracy, asserting instead that "Somali pirates have always targeted non-fishing vessels."¹¹ Neither Hansen nor other experts are able to explain the very low rates of piracy throughout the 1990s. Hansen himself attested that in "1992 there were simply no recorded piracy attacks in Somalia. In 1993, there were fewer recorded incidents of piracy in Somalia than in Italy."¹²

Others trace maritime piracy to the conflict and lawlessness on land but fail to resolve the puzzling fact that the instances of predatory criminal piracy of the last

decade of the 20th century remained few and far between. Preeminent Somalia scholar Ken Menkhaus draws a direct link between the collapse of law and order on land in Somalia and profit-seeking armed robbery in its adjoining waters thus: “[the] act of piracy is little more than an extension of activities that armed groups have staged for years [on land]: militia roadblocks, extortion and kidnapping for ransom are a staple sources of income for gangs and militias in Somalia.”¹³

Jatin Dua joins Menkhaus, in a coauthored article, and argues that piracy was “a natural extension of this syndrome of armed criminality” on land, and “merely a waterborne extension of an old form of revenue generation,” i.e., fees for passage rights.¹⁴ But even Menkhaus had to ponder why it took more than a decade and a half of statelessness and chaos for piracy to explode:

What is puzzling is why it took so long for land-based criminal gangs and militias to realize the enormous potential of piracy just off their shores.... The pirates do employ a few new technologies, such as GPS devices, cell phones, Thuraya (satellite) phones, and advanced money-counting machines to verify that payments are in full and not counterfeit. But the basic act of piracy is surprisingly low-tech and could have been achieved at any point since 1991.¹⁵

While relevant in the broader sense and no less criminal, instances of non-defensive criminal predation throughout the 1990s remained too few to make Somalia notorious for piracy any more than attacks in Italian waters made Italy a pirate hub. Clearly, simple greed-driven criminality of a few cannot explain the rise of piracy, both the defensive and the predatory.

Challenging the claims that greed spurred Somali fishermen to attack foreign vessels, Abdirahman Jama Kulmiye argues that foreign IUU fishers had turned “once productive swathes of seabed ... into marine deserts” before defensive Somali piracy started.¹⁶ Several individual analysts and research teams reached broad similar conclusions. In 2008, the United Nations Somalia Monitoring Group reported that “the ecology and economy of these areas have been adversely affected by years of illicit overfishing by foreign vessels and the dumping of toxic waste into Somali territorial waters.”¹⁷ The following year, Mohamed Abshir Waldo similarly contended that, since the collapse of the central government, “poaching vessels encroached on the local fishermen’s grounds, competing for the abundant rock-lobster and high value pelagic fish in the warm, up-swelling 60kms deep shelf along the tip of the Horn of Africa. The piracy war between local fishermen and IUUs started here.”¹⁸

Abdi Samatar, Mark Lindberg and Basil Mahayni further nuance this school of thought by arguing that resource pirates, i.e., foreign IUU fishers, plundered Somalia’s marine environment and resources, undermining the local moral economy of subsistence guarantees.¹⁹ “It is not that Somalis are objecting to non-Somalis fishing in their waters,” they argued, but because “the loot of the fish pirates has been on such an egregious scale, they are objecting to the fact that it endangers their livelihoods ... [the] resource pirates’ callous ransacking of resources without consideration of the livelihood needs of the local population.”²⁰ Similarly in 2014, U. Rashid Sumaila and Mahamudu Bawumia examined developments in Somali waters against

principles of ecosystem justice to make a tentative link between the injustice that they ascertained and Somali piracy.²¹

Captured foreign fishing vessels proved ready—even eager—to directly pay the vigilantes handsome fines/ransoms in order to secure expeditious release, hence cutting their losses and minimizing further costs. In so doing, they opened the floodgates of predatory, criminal trade. Greed-driven criminal elements hijacked the fishermen’s impromptu defensive measures and started to indiscriminately attack all vessels, commandeer them to pirate dens, i.e., “safe” harbors along the Somali coast, and demand ransom for their release and the release of their sailors. This predatory criminal trade quickly escalated because of windfall profits at a time when the local fisheries sector had collapsed and poverty and joblessness among young men in the coastal areas and the hinterlands consequently worsened.²² In the wake of the December 2004 tsunami, a business-minded shrewd organizer named Mohamed Abdi Hassan “Afweyne” brought together prominent fishermen vigilantes—Abshir Abdullahi Abdule “Boyah,” Garad Mohamed and Farah Abdullahi, among others—and launched the first predatory pirate attack in April 2005.²³ Once started, ransom piracy took on a life of its own and exacted a heavy toll on Somalis themselves, as well as non-Somali sailors, businesses and the global economy at large.

The escalation of piracy spurred the rise of subsidiary businesses and services that catered to the various demands of the burgeoning criminal enterprise. One such service was ransom negotiation with the relatives and companies of the hostage sailors and vessels. During the early phase of ransom piracy, Somali pirates accepted the services of anyone, mostly Somalis, who they felt could deliver them the ransom. Early on, the ransoms came through *hawalas* (Somali money transfers) and wire transfers to known individuals and bank accounts. Later, ransoms had to be delivered in cash, a process that involved foreign (including some Western) actors in both the negotiations and ransom delivery. The Mombasa-based East Africa Seafarers’ Assistance Program (SAP) seems to have found itself mediating between the two sides from the earliest case of ransom piracy.²⁴

As foreign professional negotiators emerged on the other side of the equation and shipping companies started to hire them, many of the early pirate intermediaries and negotiators lacked the capacity to keep up with the drawn-out brinkmanship of the former. Then, around 2008, a diverse group of Somali and non-Somali intermediaries emerged as go-betweens for the pirates in Somalia and the shipping companies and relatives of foreign hostages. Conveniently located in some Middle Eastern or East African cities, they briefly overtook all pirate negotiations before they too lost their position because many pirates felt cheated and even double-crossed by the Somali middlemen who lived far from the pirates’ reach. Besides the reported consequent deaths of some negotiators-cum-translators in the hands of paranoid pirate linchpins, the case of three *Prantalay* Thai fishing vessels (11, 12 and 14) that were seajacked in April 2010 epitomizes the breakdown of trust between the pirates, the negotiators and the foreign companies, worsening the tragedy of the situation. The rest of this article is dedicated to examining the available data on that tragic story. It draws from media outlets, policy reports and several repeat-interviews

and consultations with Somali sources on the ground, including the failed negotiator of the pirates.

The Thievery and Tragic End of the *Prantalay* Vessels

With over 8,000 employees, the Bangkok-based PT Interfisheries was at the time of the incident a well-established seafood provider, operating a total of 17 fishing vessels, some of which fished the rich waters along the African side of the Indian Ocean out of Djibouti.²⁵ This seems like an innocuous—even mundane—practice until one takes into account that foreign vessels from European and Asian distant water fishing nations (DWFN) pirate Somali maritime resources by staging their IUU fishing operations from—and landing their catch in—nearby countries in East Africa, the east African island nations or the Middle East.

On 18 April 2010, while returning from such an operation out of Djibouti, three of PT Interfisheries' vessels (*Prantalay 11*, *Prantalay 12*, and *Prantalay 14*) encountered Somali pirates more than 1,000 nautical miles off the coast of Somalia. All three sister vessels and their total crew of 77 Thai and Burmese sailors were commandeered to the Somali coast and arrived at the notorious pirate hub, Gara'ad, in the southern tip of Puntland. Whereas *Prantalay 12* went aground and was washed ashore, *Prantalay 11* and *Prantalay 14* briefly served as pirate motherships. Of the 77 foreign fishermen, 62 have been accounted for (44 rescued, 14 freed by the pirates and local authorities and 4 ransomed); some of the remaining 15 are confirmed dead and others are presumed to have died under the crude conditions of captivity.

How did all this come about when the typical story of ransom piracy in Somalia involved the negotiation—if in some cases prolonged—between the pirates and company representatives, an agreement on the ransom, its delivery or transfer, and the freeing of hostages? The short answer is that the pirates were double-dealing, the negotiators fraudulent, the intermediaries duplicitous and the foreign IUU fishers treacherous. This all adds up to constitute a very violent environment, in which the ordinary Thai and Burmese fishermen found themselves.

When the captive *Prantalay 11*, *12* and *14* arrived off the coast of Gara'ad, in the southern tip of the autonomous Puntland State of Somalia, the pirates brought a clansman and relative of some of the pirates onboard to help them negotiate the ransom with the company owners. In the ensuing pre-negotiation posturing, the pirates demanded a whopping \$9 million per vessel—a total of \$27 million.²⁶ The Thongchai Tavanapong family, which owned the company, for their part responded that the mother company itself, i.e., PT Interfisheries, was not worth more than half a million dollars. They, moreover, insisted that their company had not been involved in any illegal activity and that their vessels were captured in international waters.²⁷ Yet the vessels' records/manifest curiously carried the names of two Somali men as local affiliates.

While there may not be hard evidence at this point that the PT InterFisheries

vessels were involved in IUU fishing in Somali waters, that they operated out of a nearby country and that they had Somali names in their registers as agents and representatives is straight out of the rule book of IUU fishers in Somali waters. In the end, however, the ransom pirates who seajacked the vessels in April 2010 did not care about the legality of the vessels' activities, where they caught their catch and whether they violated Somali waters in the process, because piracy as a defense against foreign illegal fishing had long come and gone; only the claim lingered on as a rationalization.

When actual communication started between the pirates and the company, the latter first told the pirates to communicate with the two men on the vessels' papers: KA (code name) is a one-time Somali diplomat hailing from Puntland and based in Dubai; and GIA (also a code name) is a Sa'ad from Hawiye clan of south Galkayo, Galmudug, but based in Mogadishu. But when the pirates insisted that they were not going to involve any intermediaries, the company continued to deal with them and even offered \$200,000. After several weeks of going back and forth, the company agreed to a ransom of \$1.2 million, at \$400,000 per vessel. Three weeks later, the pirates turned down that offer, whereupon the pirate negotiator told me, "I told them again that \$1.2 was all the company could give them and when they refused, I came down [off the boats] and the pirates decided to use the two boats as motherships ... [until] they encountered Indian counter-piracy warships, which destroyed both of the Thai fishing boats, rescued the sailors and arrested the pirates in India."²⁸

The case closed, we shook hands with the pirate negotiator and parted ways in the notorious pirate town of Galkayo. But after several confidential consultations and after going back to my notes from older interviews, I arranged to meet the negotiator again. The case was not closed after all—unfortunately it is still very wide open with several confirmed dead, the fate of others still unknown, and the survivors living with the trauma of the horrifying experience.

The exact timing is hazy still but the broad contours of the deal that went sour can be reconstructed from the limited available data, particularly the confidential interviews in Somalia. After the negotiations deadlocked early on, the Dubai-based former Somali diplomat and PT Interfisheries agreed on the \$1.2 million ransom and the former (KA) convinced the company to release the money to him, and that he would get the pirates to accept the ransom and release the three fishing boats. KA then traveled to Puntland where he started to meet and communicate with ranking government officials, local elders and the pirate negotiator. The negotiator even showed him around Galkayo.²⁹ Then the company suddenly resumed communications with the negotiator as a way of cross-checking the veracity of whatever KA may have been telling them.

Apparently, KA was the company's last hope and, given the pirates' growing distrust of Somali intermediaries in general, getting close to the negotiator was KA's only way of scoping out the pirates' intentions and actions. The two men were often together, and the negotiator confirmed KA's false claims to the company. KA reportedly offered the negotiator \$150,000 and had him call the company and tell them that their agent was on the coast within eyesight of the vessels, when he was in fact

in Galkayo, more than a torturous four hours' car ride away. The pirates may have trusted the negotiator, but he said that KA took advantage of him. KA then reportedly told the negotiator he had come with the agreed upon \$1.2 million and sought his help in convincing the pirates.

Of the eight main pirates and investors in the capture of the three Thai vessels, four were related to the negotiator, and it was these individuals that he asked to accept the \$1.2 million.³⁰ He said he even tried to pay a gang of assassins some \$50,000 in order to physically eliminate those who refused to accept, in order for his relatives to share the ransom and release the boats.³¹ *SomaliaReport*, a well-informed open source intelligence group associated with Blackwater founder Eric Prince,³² reported that other pirates had attacked *Prantalay 12* "in what might have been a clumsy attempt to liberate the ship after a sum of money was paid to a Somalia middleman."³³ I have been unable to ascertain if this was the work of the negotiator or that of a different set of hired gun slingers.

Meanwhile, KA traveled to the Puntland port and commercial city of Bosaso, where, it is reported, he recruited a powerful Puntland cabinet minister who mobilized his vast contacts and liaised with some elders in the area where the Thai ships were held. Although, when he traveled to Bosaso, KA had disappeared on the negotiator, the latter had maintained contacts with the company and discovered KA's maneuverings. Only then did the negotiator disclose to the company that KA had not delivered the ransom to the pirates, and then told the pirates that KA had swindled them of the \$1.2 million ransom the company had sent.³⁴

While the angry pirates were in a frenzied state of paranoia and speculation, the Puntland cabinet minister made arrangements through his local contacts to meet with elders and to distribute some \$300,000 among them in order to win their intercession and exert pressure on the pirates to release the ships.³⁵ The community in Gara'ad had previously said that the reason they could not effectively fight the pirates was because they did not have a functioning administration and sufficient government presence. In response, the regional authority had been planning to travel to Gara'ad to talk the community into doing the same thing as Eyl, talk to the elders and the youth lest they be considered as willing hosts and accomplices of the pirates.³⁶ Fully aware of that plan, the minister brought along with him the Director General of Counter-Piracy in what was disguised as an awareness-raising tour, with meetings with elders and the youth of the district purportedly about setting up administrative structures to assist antipiracy initiatives.³⁷

Meanwhile, it was rumored that a government entourage was coming to cut telephone communications in order to attack the pirates in coordination with EU and NATO naval forces. The pirates' negotiator in Galkayo got wind of the details of the planned trip and alerted the pirates. The pirates waited in ambush when the ministerial caravan of six vehicles—including four "technicals," i.e., machinegun mounted trucks—arrived on October 11, 2010. Around 7:30 that morning, the minister's convoy came under heavy fire from the pirates and immediately lost one of the vehicles. As the remaining five vehicles tried to escape, the pirates gave chase—with a well-coordinated interceptor coming from the opposite direction—until they

captured the minister and the director general around 2:00 p.m. and herded them to the pirate den of Gara'ad, where they arrived after 5:00 p.m. Intense government pressure and negotiations with the elders secured the release of the two ranking government officials.³⁸

The pirates took the US\$20,000 that they found on the minister, but they did not discover the hundreds of thousands more in a custom-made box under the front passenger seat of the minister's car. The car was returned to the minister on the government's insistence and the box and its contents were found intact.³⁹

The *Prantalay* Vessels as Motherships

After another, even clumsier scheme to free the hostages by passing them weapons, the pirates stopped feeding the sailors, deeming them no longer useful. Several hostages are reported to have died due to neglect and starvation. In the meantime, the pirates decided to use the vessels as motherships. Given the small size, limited capacity, and oft-poor construction of the pirate boats, pirates had increasingly resorted to the use of motherships to transport small attack skiffs far into the open ocean before launching them at their prey from closer proximity. These are often hijacked or rented larger vessels, typically dhows from the region, capable of sailing the open ocean, carrying the pirate attack skiffs deep into the ocean before launching them at unsuspecting prey from a closer range.⁴⁰

Given that there was at least one such incident in 1998 involving the freighter *Noustar*,⁴¹ one can safely say that the idea of a mothership was not an accidental "innovation" the ransom pirates stumbled upon when a hijacked vessel proved incapable of generating the ransom they sought.⁴² Motherships enabled pirates to strike hundreds, and eventually more than a thousand, miles from shore. With motherships, pirates also managed to stay at sea for longer, defy the turbulent monsoon seasons, and attack faster and much bigger vessels than they otherwise would have done.⁴³ Both before and after the advent of motherships, however, the final boarding of the prey vessel was done from fast pitching, rickety small boats serving as platforms to scale the larger vessels using grapple hooks or retractable aluminum ladders.

Having given up on a ransom for the Thai fishing boats, the pirates turned them into motherships. They formed three big groups of dozens of pirates and each group sent its respective vessel on piracy missions and captured two other vessels. But *Prantalay 12* (with its crew of four Thai and fourteen Burmese sailors) broke anchor and was washed ashore where it remained beached near Gara'ad. The pirates saw no financial prospects in the Burmese sailors and let them go. The Puntland Marine Police Force (PMPF) staged a surgical operation to extract the freed hostages from the pirate area and transported them to the regional capital, from where UNHCR flew them out of Somalia.⁴⁴ At least four Thai hostages were taken inland and for years, few knew their whereabouts.

On its second journey as a mothership, on January 28, 2011, *Prantalay 14* (with a crew of 16 Burmese and 4 Thai) came to the attention of the Indian navy ship

Cankarso near the Lakshadweep islands. In the ensuing exchange of fire with the pirates, the Indian navy sunk the ship, rescued the hostages and arrested the pirates. A week later, the pirates on *Prantalay II* attempted to hijack the Greek bulk carrier, MV *Chios*, which sent out an SOS call. Two Indian coastguard ships, INS *Tir* and CGS *Samar*, responded to *Chios*'s distress call. A day later, on February 6, the Indian warships located the pirates close to Kavaratti islands around the same Lakshadweep islands and captured them without encountering much resistance. They rescued 24 hostage sailors, arrested the pirates, and destroyed *Prantalay II*.⁴⁵

The exact number and whereabouts of the survivors remained unknown in the vast interior of central Somalia until the four Thai sailors were released in February 2015, reportedly upon the payment of an undisclosed sum in ransom, nearly five years after their captivity.⁴⁶ Of the 15 unaccounted sailors, an unknown number of hostages died of neglect under captivity, their bodies left to rot until local residents in the Gara'ad area interred them with bare minimum burial rites; the rest are presumed dead.

Conclusion

Although not the only incident, the chain of events that culminated in this human tragedy represents the multiple layers of greed, deceit and treachery surrounding the crimes of illegal fishing and piracy off the coast of Somalia. Between the fishing company, which owned the boats, claiming that it released the agreed upon \$1.2 million ransom and the pirates, who claimed to not have received any of it, a few people got rich and 77 captive fishermen faced a harrowing experience and 15 of them perished under terrible conditions. The Indian navy rescued 44 of the sailors in early 2011; 14 (those hailing from Myanmar) were rescued by the regional government in Puntland; and 4 were ransomed. A few are confirmed dead while the rest are presumed to have died, too.

By piecing together what is known so far about the experiences of this squadron of foreign fishing vessels and their sailors in Somalia with new material from the ground, this paper has showcased pirate callousness, negotiator fraud, intermediaries' duplicity, treachery of foreign fishing companies (and their local partners) and the complicity of foreign governments (in the region and beyond) in ways that encapsulate aspects of the Indian Ocean region as a violent political arena. As an economic space, it is replete with cutthroat competition and exploitation. In terms of social fabric, the region lacks meaningful solidarity. Violence has been naturalized and it imitates the ecosystem whereby the big fish eat the small ones. Such a dynamic cannot in and of itself be sustainable; and it is very likely to become an arena of contestation to foreign interests and powers.

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Biographical Information

Awet Tewelde Weldemichael is an associate professor and Queen’s National Scholar in African History at Queen’s University in Canada. He is also an associate of the Indian Ocean World Center at McGill University. He is the author of *Piracy in Somalia: Violence and Development in the Horn of Africa*.

An Overview of Arctic Legal Regime Regarding the Protection of the Marine Environment and Some Suggestions

Ekrem Korkut and Lara B. Fowler

Structured Abstract

Article Type: Research Paper

Purpose—This article considers whether international law and the Law of the Sea have sufficient rules to protect the Arctic marine environment, and if so, to what extent.

Design, Methodology, Approach—With regards to the Law of the Sea, major issues in the Arctic that are present or impending, include (1) outer continental shelf claims; (2) passage rights through the Arctic Straits; (3) protection of marine biodiversity; (4) protection of the marine environment; and (5) military activities in the Arctic. In this research, we focus solely on the protection of the Arctic marine environment.

Findings—Although the Arctic states have adopted the 2011 Maritime Search and Rescue Agreement in order to assist each other in the event of a disaster, they have yet to establish infrastructure adequate to accomplish that goal. Moreover, there is no established mandatory or voluntary shipping routing system for the Arctic marine area.

Ekrem Korkut, Penn State Law, University Park, PA, 16802, USA; email: ezk137@psu.edu; Tel.: +1 814 441 5007

Lara B. Fowler, Penn State Law, University Park, PA, 16802, USA; email: lbf10@psu.edu; Tel: +1 814 865 4806



Journal of Territorial and Maritime Studies / Volume 6, Number 1 / Winter/Spring 2019 / pp. 64–84 / ISSN 2288-6834 (Print) / © 2018 Yonsei University

Practical Implications—The authors believe that until after above problems have been eliminated, the current Law of the Sea rules in the Arctic are not adequate to protect the Arctic marine environment and maritime safety.

Originality, Value—The Polar Code entered into force on 1 January 2017. In the present article, we analyze the legal gaps regarding the protection of Arctic marine environment and maritime safety after the entrance of the Polar Code.

Keywords: Arctic Ocean, Marine Environment, Maritime Safety, Oil Spill, Polar Code, UNCLOS

Introduction

What constitutes the Arctic has been defined in a number of ways. One author described it as “land and sea areas north of 60 degrees for the United States, Canada, Russia, Norway, Sweden, and Finland, and the whole of Greenland and Iceland.”¹ These countries are known as the Arctic States. Another considered it to be “a single, highly integrated system comprised of a deep, ice covered, and nearly isolated ocean surrounded by the land masses of Eurasia and North America, except for breaches at Bering Strait and in the North Atlantic.”² Approximately two-thirds of the Arctic is ocean.³ Although the Arctic States have a particular interest in changes in the Arctic, the rest of the planet has a stake as well. The Arctic ice is melting twice as fast as ice in the rest of the world.⁴ It is estimated that the Arctic holds about 90 billion barrels of oil and 44 billion barrels of natural gas liquids,⁵ which means it holds more hydrocarbon reserves than Saudi Arabia and Russia combined.⁶ Because the effects of global warming in the Arctic will also affect global climate, problems and changes in the Arctic concern the entire global community.⁷ As Arctic ice diminishes, changes in the Arctic are “opening up new opportunities and posing new challenges.”⁸ In this situation, maintaining peace and fostering cooperation will be crucial for the interest of particular States and the common interest as a whole might create conflict.⁹ Four factors make the Arctic Ocean so important and challenging.¹⁰ First, the Arctic Ocean is an open ocean surrounded by land; in contrast to Antarctica, which is a continent surrounded by ocean.¹¹ Second, global warming is opening the Arctic to navigation, thus allowing more shipping vessels to pass through Arctic sea routes.¹² Third, the emergence of new oil and gas reserves are creating new exploration possibilities.¹³ Finally, there is currently little international coordination in the Arctic Region.¹⁴

Because ice-covered areas are treated no differently than regular maritime areas, the 1982 United Nations Convention on the Law of the Sea¹⁵ [hereinafter: LOSC] plays an important role in maintaining peace in the Arctic. All Arctic States except the United States are parties to the LOSC. In the 2008 Ilulissat Declaration, five Arctic Nations—Canada, Russia, the United States, Denmark and Norway—declared they would respect the existing Law of the Sea.¹⁶ Under the LOSC, major issues in the Arctic that are present or impending, include (1) outer continental shelf claims;

(2) passage rights through the Arctic Straits; (3) protection of marine biodiversity; (4) protection of the marine environment; and (5) military activities in the Arctic. In this research, we focus solely on the protection of the Arctic marine environment.

First, we explore the major players and institutions in the Arctic including the Arctic Council, then analyze how the LOSC and the contemporary Law of the Sea relate to the protection of the marine environment in the Arctic.

The Arctic Council

The Arctic Council, which is “the only fully circumpolar and comprehensive governance institution in the Arctic,”¹⁷ was established by the 1996 Ottawa Declaration, as a forum for Arctic Nations. The Arctic Council’s members include the United States, Canada, Denmark, Norway, Finland, Sweden, Iceland and Russia. It intends to “provide a means for promoting cooperation, coordination and interaction ... on common Arctic issues, in particular issues of sustainable development and environmental protection in the Arctic.”¹⁸ A permanent secretariat was established in Tromsø, Norway, on 21 January 2013. Before 2013, its location changed biennially with the chairmanship of the Council.¹⁹ The Secretariat provides administrative and organizational support, and acts as a liaison between the Arctic members.²⁰

In general, the Council does not make binding decisions. Rather, it is a forum for discussion of Arctic issues, apart from military matters.²¹ Its guidelines, assessments and recommendations can only be enforced by each Arctic State.²² According to Haftendorn, the Arctic Council is not “a decision-making organization, but rather a decision-shaping body based on consensus.”²³ The Council ensures that States parties comply “with soft law norms rather than hard rules...”²⁴ However, in 2011 the Arctic Council adopted its first binding agreement with the “Agreement on Cooperation in Aeronautical and Maritime Search and Rescue in the Arctic.”²⁵ Later, the 2013 Agreement on Cooperation on Marine Oil Pollution Preparedness and Response in the Arctic and the 2017 Agreement on Enhancing International Arctic Scientific Cooperation were adopted by the Council.²⁶

In 1991, the Arctic States adopted the Arctic Environmental Protection Strategy [hereinafter: AEPS] and established four environmental working groups: (1) Conservation of Arctic Flora and Fauna (CAFF); (2) Protection of the Arctic Marine Environment (PAME); (3) Emergency Prevention, Preparedness and Response (EPPR); and (4) the Arctic Monitoring and Assessment Programme (AMAP). In 1998 and 2006 two additional working groups were added to the existing working groups: The Sustainable Development Working Group (SDWG) and Arctic Contaminants Action Program (ACAP).²⁷

In addition to its eight member States, the Council includes thirteen non-Arctic States as observers: India, Singapore, South Korea, Japan, China, France, Germany, Italy, Poland, Spain, the Netherlands, United Kingdom, and Switzerland as of Jan-

uary 21, 2018.²⁸ Observer status is open to non-Arctic states and intergovernmental and non-governmental organizations that “the Council determines can contribute to its work.”²⁹ Observers are invited to meetings of the Arctic Council; their primary role is to observe the work of the Council.³⁰ In the meetings they can make statements, submit relevant documents and “provide views on the issues under discussion.”³¹

Because the changing Arctic not only affects ecosystems, but also the lives of indigenous peoples, a number of indigenous people organizations are permanent participants of the Arctic Council³²: the Aleut International Association, the Arctic Athabaskan Council, the Gwich’in Council International, the Inuit Circumpolar Council, the Russian Association of Indigenous Peoples of North (RAIPON) and the Saami Council.³³

The United Nations Convention on the Law of the Sea (LOSC)

The basic framework for the seas is presented in the Law of the Sea Convention (LOSC). It was adopted in the Third United Nations Conference on the Law of the Sea following a decade of negotiations and came into force in 1994. As of 2018, it has 168 parties. Today, the LOSC is widely accepted as the “constitution” of the oceans and that most provisions of the LOSC represent the customary international law. Article 234 of the LOSC gives coastal States the right to adopt and enforce laws and regulations for the prevention of marine pollution from vessels in ice-covered areas within the limits of the exclusive economic zone (EEZ).³⁴ Also, some writers allege that the Arctic Ocean is an enclosed or semi-enclosed sea.³⁵ If that is the case, the LOSC urges States bordering enclosed or semi-enclosed seas to cooperate directly or through a regional organization regarding, *inter alia*, protection of the marine environment and the coordination of scientific research.³⁶

In order to understand how the LOSC applies to the Arctic, it is critical to consider the LOSC zonal approach. A coastal State measures its maritime zones from baselines. The waters landward of the baselines are internal waters of a State. The LOSC regulates three types of baselines: normal baselines, straight baselines³⁷ and archipelagic baselines (Article 47, LOSC). Internal waters are treated as a land territory of a State. The coastal State has full authority to adopt and enforce its laws, and limit foreign vessels entering into internal waters. A territorial sea, on the other hand, extends up to 12 nautical miles from the baselines. It covers the water column, seabed and subsoil adjacent to the coastal State. Although the coastal State maintains its sovereignty in its territorial waters, other States have the right of innocent passage for their vessels through the territorial sea of the coastal State. Beyond the territorial sea, a contiguous zone allows the coastal State to exercise its control in order to “a) prevent infringement of its customs, fiscal, immigration or sanitary laws and regulations within its territory and territorial sea; and b) punish infringement of the above laws and regulations committed within its territory or territorial sea” (Article

33, LOSC). A contiguous zone may not extend beyond 24 nautical miles from the baselines.

An exclusive economic zone provides coastal States with sovereign rights to explore and exploit, conserve and manage living and non-living resources of the water column and of the seabed and subsoil and carry out other economic activities in the zone up to 200 nautical miles from the baselines (Article 56[1][a], LOSC). Freedom of navigation and of over flight, as well as freedom to lay pipelines and cables, is maintained through the EEZ of a coastal State. The high seas are “all parts of the sea that are not included in the exclusive economic zone, in the territorial sea or in the internal waters of a State, or in the archipelagic waters of an archipelagic State” (Article 86, LOSC). On the high seas, States enjoy the freedom of the high seas including the freedom to access living resources and freedom of navigation. There are four maritime areas in the Arctic that are part of the high seas: the Barents Sea (loophole), the Norwegian Sea (banana hole), the Bering Sea (donut hole) and the central Arctic Ocean.³⁸

All Arctic States except the United States are parties to the LOSC. Reasons why the United States has not ratified the convention include its dissatisfaction with being subject to the authority of organizations created by the LOSC, i.e., the International Seabed Authority, and its opposition to emergence of “unaccountable international bureaucracies.”³⁹ LOSC opponents are also against the payment provision of the LOSC,⁴⁰ which provides that a coastal State must make payments or contributions to the Authority as a consequence of revenues derived from the exploitation of resources beyond the 200 nm continental shelf limit (Article 82, LOSC). Another argument for LOSC opponents is that ratifying the LOSC would subject the United States to international lawsuits due to obligations that might arise from the LOSC.⁴¹

Protection of the Arctic Marine Environment

The LOSC establishes a general framework, i.e., a constitutional character, to protect and preserve the marine environment from marine pollution.⁴² Additional international agreements also govern marine pollution in the high seas.

Pollution Prevention Under the LOSC

LOSC Article 192 observes, “States have an obligation to protect and preserve the marine environment.” They are required to take all necessary measures to prevent, reduce and control marine pollution from any source (Article 194, LOSC). Every State is required to exercise its jurisdiction and control over vessels flying its flag (Article 94, LOSC and Article 211[2]). Flag States are required to take measures to ensure that their flagged vessels are prohibited from sailing until they can proceed to sea in compliance with international rules and standards regarding prevention of marine pollution from vessels (Article 217[2], LOSC). They must ensure that their flagged vessels carry required certificates and are inspected periodically. Flag States

must initiate immediate investigation and proceedings against vessels that violate international pollution-control standards irrespective of where the violation occurred or where the pollution caused by such violation occurred (Article 217[3] and [4], LOSC). According to Joyner, enforcement of internationally agreed rules by States underpins protection of the marine environment.⁴³ LOSC Article 235 provides that “States are responsible for the fulfillment of their obligations concerning the protection and preservation of the marine environment.”

Pollution Prevention Under Other International Conventions

In addition to the LOSC, there are numerous other international conventions that govern pollution on the high seas. The International Maritime Organization (IMO), a specialized United Nations agency, was established by the IMO Convention to provide global regulations, treaties and guidelines for international shipping in matters concerning maritime safety and prevention of marine pollution from vessels.⁴⁴ Today, the IMO includes 172 State parties and 77 international non-governmental organizations that enjoy consultative status.⁴⁵ The IMO deals with safety and security of navigation and prevention of pollution through its conventions such as Safety of Life at Sea (SOLAS),⁴⁶ Prevention of Marine Pollution (MARPOL),⁴⁷ Oil Pollution Preparedness, Response and Co-operation (OPRC),⁴⁸ Prevention of Marine Pollution by Dumping of Wastes and Other Matter (hereinafter: 1972 London Convention)⁴⁹ and the 1969 High Seas Intervention Convention.⁵⁰ The SOLAS and MARPOL Conventions cover more than 99 percent of the world’s merchant shipping tonnage.⁵¹

The SOLAS Convention establishes “minimum standards for the construction, equipment and operation of ships, compatible with their safety.”⁵² It consists of 13 Articles, with an annex composed of 12 chapters. Chapters of the Annex include the following: I: General Provisions, II-1: Construction, II-2: Fire Protection, III: Life Saving Appliances, IV: Radio Communications, V: Safety of Navigation, VI: Carriage of Cargoes, VII: Carriage of Dangerous Goods, VII: Nuclear Ships, IX: Management of Ships, X: High Speed Craft, XI-1: Special Measures to Enhance Maritime Safety, XI-2: Special Measures to Enhance Maritime Security, XII: Bulk Carriers. While flag States are required to inspect and survey their ships, and they must guarantee the completeness of the inspections and surveys,⁵³ port States must verify that foreign vessels carry a valid certificate.⁵⁴ Such certificate is accepted as valid by the port State unless there are clear grounds for believing that the ship does not comply with standards in the certificate.⁵⁵ In that case, the port State is not to allow the ship to proceed to sea until it can sail without danger to the passengers or the crew.⁵⁶

The MARPOL Convention seeks to prevent the discharge of harmful substances from ships except ships involved in dumping, seabed exploration and exploitation, and from legitimate scientific research into pollution abatement or control.⁵⁷ The MARPOL Convention includes six annexes: The Prevention of Pollution by Oil (Annex I), the Control of Pollution by Noxious Liquid Substances (Annex II), the Prevention of Pollution by Harmful Substances in Packaged Form (Annex III), the

Prevention of Pollution by Sewage from Ships (Annex IV), the Prevention of Pollution by Garbage from Ships (Annex V) and the Prevention of Air Pollution from Ships (Annex VI). Annexes I and II are mandatory. In other words, if a State were to become a party to MARPOL, it must also ratify Annexes I and II. Other annexes remain optional to accede. The MARPOL Convention applies to the discharge of harmful substances from vessels.⁵⁸ Annexes I, II, IV and V provide for the establishment of “special areas,” where more stringent discharge standards apply.⁵⁹ However there is no established special area in the Arctic Ocean.⁶⁰ Because of the high risk of single-hull tankers, Annex I, Regulations 19 and 20 require that new and most existing vessels have a double-hull for their cargo areas.

In contrast, the 1972 London Convention applies to ocean dumping, which is the disposal of land-generated wastes at sea.⁶¹ The London Convention requires States parties to take effective measures to prevent marine pollution caused by dumping or incineration of waste at sea.⁶² The 1996 London Protocol prohibits all dumping except as allowed in Annex I of the protocol.⁶³ These are “dredged material; sewage sludge; fish wastes [...]; vessels and structures or other man-made structures at sea; inert, organic geological material; organic material of natural origin; bulky items primarily comprising iron, steel and concrete for which the concern is physical impact [...]; carbon dioxide streams from carbon dioxide capture processes for sequestration.”⁶⁴ Moreover, a ship may not carry out dumping without the permission of competent authorities of its flag state (Article 210[3], LOSC). Dumping by a foreign ship within the waters of a coastal State is subject to permission of the coastal State (Article 210[5], LOSC).

According to LOSC Article 198 when a State becomes aware of imminent danger of damage by pollution to the marine environment, the State is required to notify other States it thinks will be affected by such damage, as well as the competent international organizations. Similarly, the OPRC Convention provides “a global framework for international co-operation in combating major incidents or threats of marine pollution.”⁶⁵ A State party to the OPRC Convention must require masters or other persons commanding ships flying the State’s flag to immediately report to the nearest coastal State any event on their ship involving a discharge or probable discharge of oil (Article 4[1]). The coastal State must then inform other States whose interests are affected or likely be affected (Article 5[1]). Furthermore, each party is required to establish a national system for responding promptly and effectively to oil-pollution incidents (Article 6[1]). A protocol to the OPRC Convention extended the application of the OPRC to hazardous and noxious substances [hereinafter: OPRC-HNS Protocol].⁶⁶

The LOSC allows coastal States to take measures beyond the territorial sea proportionate to damage “from pollution or threat of pollution following upon a maritime casualty or acts relating to such a casualty, which may reasonably be expected to result in major harmful consequences.”⁶⁷ Similarly, the 1969 High Seas Intervention Convention regulated the intervention rights of a coastal State regarding pollution casualties on the high seas.⁶⁸ According to Article 1 of the Convention, a State party can take measures on the high seas to prevent and control imminent danger

from the pollution of the sea by oil, “following upon a maritime casualty or acts related to such a casualty, which may be reasonably expected to result in major harmful consequences.” A coastal State is required to consult with other States affected by the maritime casualty, particularly with the flag State or States, before taking any measures regarding the casualty (Article 3[a]). In cases of extreme urgency, the coastal State is allowed to take necessary measures without prior notification or consultation (Article 3[d]). The 1973 Protocol Relating to Intervention on the High Seas in Cases of Pollution by Substances Other than Oil extended the application of the convention to substances other than oil (Article 1).⁶⁹ It is said that the LOSC lowered the threshold for intervention in case of pollution from maritime casualties.⁷⁰ The intervention by a coastal State under the LOSC is allowed when there is “actual or threatened damage” that may cause “major harmful consequences,” whilst intervention by the coastal State under the 1969 High Seas Intervention Convention is allowed if there is a “grave and imminent danger” of damage to the coastline.⁷¹

Pollution Prevention Under Regional Conventions Related to the Arctic Ocean

Regulation of pollution in the Arctic is subject to additional regional agreements. One regional treaty, which applies to a part of the Arctic region, is the Convention for the Protection of the Marine Environment of the North East Atlantic (OSPAR).⁷² Under the OSPAR Convention, State parties are required to take measures to prevent marine pollution and take measures “to protect the maritime area against the adverse effects of human activities.”⁷³

Arctic waters constitute only 40 percent of the application area of the OSPAR Convention, and the Convention does not cover the entire Arctic.⁷⁴ Nor does the Convention deal with fisheries management.⁷⁵ Moreover, there is a tendency between parties to leave shipping issues to the International Maritime Organization.⁷⁶ The OSPAR Commission can adopt binding decisions in the event of non-compliance by a State party.⁷⁷ All 16 parties of the OSPAR Convention are from Europe⁷⁸; Canada, Russia and the United States are not parties. Criticisms regarding the application of the OSPAR Convention in the Arctic are that these conventions are binding only upon those States that are parties to them,⁷⁹ therefore they do not fulfill regulatory and governance needs in the Arctic.⁸⁰

Due to concerns about potential oil pollution in the Arctic, the Arctic Council adopted the 2013 Agreement on Cooperation on Marine Oil Pollution Preparedness and Response. The goal of this agreement is to “strengthen cooperation, coordination and mutual assistance among the parties on oil pollution, preparedness and response in the Arctic in order to protect the marine environment from pollution by oil.”⁸¹ The Agreement is enforced by the Emergency Prevention, Preparedness and Response (EPPR) Working Group.⁸² Article 4 requires parties to maintain a national system to respond to oil pollution incidents promptly and effectively.

The Polar Code

In 2002, the International Maritime Organization (IMO) adopted “the Guidelines,” which provides construction requirements, equipment standards, and operational and environmental measures for shipping that apply only in the Arctic.⁸³ They were updated in 2009.⁸⁴ Later, the IMO developed the Guidelines into a mandatory Polar Code, which lays out safety measures and pollution prevention measures for ships navigating in polar waters (hereinafter: Polar Code).⁸⁵ Accordingly, it covers shipping matters relevant to navigation in the polar regions and to the protection of the marine environment in the polar regions.⁸⁶ The Polar Code was adopted through amendments to the Annexes of SOLAS and MARPOL that made the Code mandatory.⁸⁷ Part I of the Polar Code, adopted in November 2014, deals with safety measures, and Part II of the Code, adopted in May 2015, regulates pollution prevention. While safety provisions of the Code became Chapter XIV (Safety Measures for Ships Operating in Polar Waters) of SOLAS,⁸⁸ environmental provisions of the Code were included in MARPOL through amendments in Annexes I, II, IV and V of MARPOL.⁸⁹ Each main part of the Code (Part I and Part II) is divided into subparts as A and B, i.e., Parts I-A and I-B, and Part II-A and Part II-B. Only Parts I-A and II-A are mandatory; Parts I-B and II-B are recommendatory. The Code does not address the issue of discharge of gray water (from sinks, laundries, showers, etc.) from cruise ships and it bans the use of heavy fuel oil (HFO) only in Antarctica, not in the Arctic.⁹⁰ When ships burn heavy fuel oil black carbon is released into the air. It then “lands on snow and ice and accelerates its melting.”⁹¹ Because HFO is a highly viscous substance and breaks down slowly, and because of severe weather conditions in the Arctic, an HFO spill in the polar regions would be very difficult to clean up.⁹² Therefore, the European Parliament adopted an Arctic Policy resolution on 16 March 2017 in which it asks its EU member States to take all necessary steps to actively facilitate the ban on the use and carriage of HFO.⁹³

The Code requires:

Ships intending to operating in the defined waters of the Antarctic and Arctic to apply for a Polar Ship Certificate, which would classify the vessel as Category A ship—ships designed for operation in polar waters at least in medium first-year ice, which may include old ice inclusions; Category B ship—a ship not included in category A, designed for operation in polar waters in at least thin first-year ice, which may include old ice inclusions; or Category C ship—a ship designed to operate in open water or in ice conditions less severe than those included in Categories A and B.⁹⁴

However, the Code does not regulate fishing vessels, pleasure craft or offshore mobile drilling units.⁹⁵ With regard to the interplay between the Polar Code and Article 234 of the LOSC, it is said the Polar Code will not restrict the application of Article 234 since “Article 234 is still an alternative basis for adopting stricter rules for ice-covered areas.”⁹⁶ In several instances, the LOSC refers to generally accepted international rules and standards. Jensen, in his article on the Polar Code, said that mandatory

provisions of the Code are generally accepted international rules and standards and therefore they are covered as a relevant rule of reference in the LOSC.⁹⁷

Protection of the Marine Environment from Seabed Drilling Activities

The Arctic still remains ice-covered even during summer. Therefore, cleaning up an oil spill in offshore drilling areas would be more challenging than in other seas. If a blowout in a drilling session is not stopped, it could release oil for up to eight months, until the site becomes accessible again.⁹⁸

Exploration and exploitation of the seabed and its subsoil could cause marine pollution through “the release of harmful chemicals used in routine processes of drilling, the discharge of ‘produced water’ from oil platform operations, and the emission of airborne pollutants from activities such as ‘flaring’ of excess gas.”⁹⁹ The LOSC requires coastal States to adopt laws and regulations to prevent, reduce, and control marine pollution arising from such seabed activities under their jurisdiction (Article 208 [1]). It also requires them to implement applicable international rules and standards for the prevention of marine pollution arising from seabed activities (Article 214, LOSC). They are required to harmonize their national policies concerning the prevention and reduction of marine pollution from seabed activities at a regional level (Article 208[4], LOSC). It must be kept in mind that there is no international convention for the prevention of pollution from seabed drilling activities except the MARPOL Convention, which extends the definition of ships to “fixed or floating platforms.”¹⁰⁰ Therefore, the discharge and emission standards of MARPOL are applicable to offshore installations as well.¹⁰¹

Regarding seabed activities in the Area, States are required to adopt laws and regulations to prevent, reduce and control marine pollution from activities carried out by their vessels, installations or other structures in the Area (Article 209[2], LOSC). The International Seabed Authority adopts appropriate rules, regulations and procedures for:

- (a) The prevention, reduction and control of pollution and other hazards to the marine environment, including the coastline, and of interference with the ecological balance of the marine environment, particular attention being paid to the need for protection from harmful effects of such activities as drilling, dredging, excavation, disposal of waste, construction and operation or maintenance of installations, pipelines and other devices related to such activities;
- (b) The protection and conservation of the natural resources of the Area and the prevention of damage to the flora and fauna of the marine environment (Article 145, LOSC).

The Council of the Seabed Authority is the responsible body for the enforcement of LOSC provisions relating to the seabed on “all questions and matters within the competence of the Authority” and it “invites the attention of the Assembly to cases of non-compliance” (Article 162[2][a], LOSC). Similarly, the Council has the power to “issue emergency orders, which may include orders for the suspension or adjust-

ment of operations, to prevent serious harm to the marine environment arising out of activities in the Area” (Article 162[2][w]). Therefore, protection of the marine environment from seabed activities is supervised by the Council of the Seabed Authority.¹⁰² According to Article 185(1), LOSC, “a State party which has grossly and persistently violated the provisions of this Part may be suspended from the exercise of the rights and privileges of membership by the Assembly upon the recommendation of the Council.”

In 2014, the Protection of the Arctic Marine Environment (PAME), a working group of the Arctic Council, updated its guidelines, which were adopted to promote safety during exploration and exploitation activities within the Arctic seabed.¹⁰³ Similarly, the Arctic Council adopted the 2015 Framework Plan for Cooperation on Prevention of Oil Pollution from Petroleum and Maritime Activities in the Marine Areas of the Arctic, which fosters cooperation between State parties, private sector and indigenous people in the field of prevention of marine oil pollution from petroleum and maritime activities in the Arctic Sea.¹⁰⁴ However, the Guidelines and the Framework Plan are not legally binding, rather they are being followed on a voluntary basis.¹⁰⁵

In addition to States, trade associations such as the American Petroleum Institute, the International Oil and Gas Producers Association, the International Petroleum Industry Environmental Conservation Association (IPIECA), the International Organization for Standardization have adopted standard measures for a safer drilling practice in the maritime areas.¹⁰⁶ Although the standards adopted by these associations are voluntary, they influence the oil and gas exploration industry with regard to Arctic operations.¹⁰⁷ Moreover, several States have incorporated these regulations into their domestic law.¹⁰⁸

Prevention of Marine Pollution from Land-Based Sources

Land-based marine pollution constitutes nearly 80 percent of all marine pollution, while vessel-source marine pollution, dumping, and pollution from seabed activities remain relatively small.¹⁰⁹ LOSC Article 194 requires States to take measures to prevent marine pollution from any source, including land-based resources. According to Article 207(1), States are required to “adopt laws and regulations to prevent, reduce and control pollution of the marine environment from land-based resources including rivers, estuaries, pipelines and outfall structures, taking into account internationally agreed rules, standards and recommended practices and procedures.” Air pollution from land-based activities is another source of marine pollution. Article 212(1) sets out a similar obligation for pollution from or through the atmosphere. Emission of CO₂ into the marine environment has a disastrous effect on the health of the oceans.¹¹⁰ Air pollution contaminates the oceans with “dissolved copper, nickel, cadmium, mercury, lead, zinc and synthetic organic compounds.”¹¹¹ The main causes of marine pollution from land-based sources in the Arctic Ocean include river inputs to the Arctic Ocean, atmospheric pathways, and municipal and industrial wastes—especially in the northern territories of Russia.¹¹²

Because Persistent Organic Pollutants (POPs) have a migration pattern from warmer waters to cooler waters, they accumulate in the Arctic.¹¹³ The 2001 Stockholm Convention on POPs was adopted to restrict and ultimately eliminate the use, release, and storage of specified POPs.¹¹⁴ The Convention allows parties to offer new chemicals to be added to specified POPs. Among Arctic States, only the United States has yet to ratify the Stockholm Convention.

According to LOSC Article 194(3)(a), the measures taken by a State to prevent marine pollution must include minimizing to the fullest possible extent the “release of toxic, harmful or noxious substances, especially those which are persistent, from land-based sources, from or through the atmosphere or by dumping.” As Rothwell and Stephens indicated, the LOSC provisions relating to land-based pollution are less demanding than the provisions relating to vessel-source pollution; they do not require the application of international standards, but require only that States take international standards into consideration.¹¹⁵ They have concluded, “This gives coastal States considerable latitude in determining whether to adopt pollution-abatement measures, and whether particular substances should be considered to be polluting within the meaning of Article 1(4) of the LOSC.”¹¹⁶

The United Nations Environmental Program (UNEP) has concluded regional seas programs in different seas in order to “foster implementations of international environmental law that are adapted to the specific ecological characteristics of unique marine environments.”¹¹⁷ The 2009 Regional Program of Action (RPA) for the Protection of the Arctic Marine Environment from Land Based Activities is a soft-law instrument, which is administered by the PAME working group of the Arctic Council.¹¹⁸ This program remains legally non-binding. The PAME addresses the prevention of marine pollution from both seabed and land-based activities. Similarly, the Arctic Contaminants Action Program (ACAP), a working group of the Arctic Council, acts as a mechanism “to encourage national actions to reduce emissions or other releases of pollutants.”¹¹⁹ The Arctic Council has not imposed any legally binding obligations upon its members regarding implementation of the RPA.¹²⁰

Climate Change

The impacts of the climate change in the Arctic include the “reduction of sea ice extent, thickness, and distribution; melting of glaciers; thawing of permafrost soil, and ocean acidification.”¹²¹ Although these impacts are more notable in the polar regions than in the rest of the world, the causes of climate change are still under-regulated in the polar regions.¹²² The main convention touching on the climate change is the 1992 United Nations Framework Convention on Climate Change (UNFCCC).¹²³ Article 4(2)(a) and (b) requires industrialized countries to strive to cut down greenhouse gas emissions to 1990 levels by the year 2000. The Kyoto Protocol to this convention provides emission limits for industrialized countries, as listed in Annex B of the Protocol, for the period of 2008 to 2012.¹²⁴ In the 2012 Conference of the Parties, the Doha Amendment extended this period to 2013 to 2020.¹²⁵ The entry into force of the amendment is contingent upon acceptance by three-

fourths of the parties to the Kyoto Protocol, which has not happened as of 2018. Guruswamy and Leach said: “it is highly unlikely that the Doha Amendment will be accepted by 75% of the parties to the Kyoto Protocol. In the absence of the Doha Amendment coming into force, the Kyoto Protocol will remain a moribund treaty.”¹²⁶

Among Arctic States, the United States has not yet ratified the Kyoto protocol, while Canada withdrew from the Protocol in 2011. Neither the UNFCCC nor the Kyoto Protocol addressed the specific issues linked to climate change in the Arctic.¹²⁷ However, the Arctic Council developed the Arctic Climate Impact Assessment (ACIA) in 2004 to assess the “status of knowledge and develop scenarios of future climate change.”¹²⁸

The 2015 Paris Agreement, on the other hand, aims to strengthen a global response to climate change by limiting global warming to below 2 degrees Celsius.¹²⁹ Unlike the Kyoto Protocol, this agreement requires that developing countries like China and India also act against greenhouse gas emissions. All Arctic countries ratified the agreement except Russia. On August 4, 2017, the United States announced that it would withdraw from the Agreement although it is still a party to the UN Framework Convention on Climate Change. Because the United States is the world’s second larger carbon polluter; its withdrawal from the Paris Agreement will diminish the fight against global warming.

French and Scott suggested that the Arctic States may take some regional actions against climate change, in some areas at least, notwithstanding “a polar regional response to climate change constitutes only a partial solution to what is undeniably a global problem.”¹³⁰ First, States bordering polar regions and States operating there must limit local greenhouse gas emissions.¹³¹ Second, “States must develop appropriate regional responses for the purposes of adapting to climate change and for managing activities in light of climate change and its environmental and (to a lesser extent) political implications.”¹³² Third, polar States must focus on their responsibilities at a global level to prevent greenhouse gas emissions.¹³³

Conclusion

With regard to a stronger protection for the Arctic, Geiselhart suggested establishing a more permanent and substantial institutional foundation, expanding the scope of binding law issued by the Council, attracting higher ranking representatives from Arctic nations, and increasing the number of observer-status entities.¹³⁴ He added, “The Arctic Council should call upon its members to institute an appropriate price on carbon emissions through a tax or market-based system.”¹³⁵

Young opposed a legally binding Arctic Treaty on the grounds that:

Legally binding agreements (i) require protracted negotiations to reach agreement on their substantive provisions coupled with time-consuming procedures to meet the requirements for entry into force, (ii) avoid issues expected to prove contentious in the interests of building consensus, (iii) are difficult to adapt to changing circumstances in a timely manner, and (iv) do not accord roles to non-

state actors that are commensurate with their importance in the relevant system.¹³⁶

He recommended that the International Maritime Organization establish a mandatory Polar Code for Arctic shipping, that the North East Atlantic Fisheries Commission govern industrial fishing throughout Greenland and Norwegian Seas, the Stockholm Convention on POPs (Persistent Organic Pollutants) address issues pertaining to contaminants, and that the forum provided by the Convention on Biological Diversity work on matters pertaining to the protection of species and the rights of indigenous people in the Arctic.¹³⁷ Finally, he said the effectiveness of the Council must be enhanced.¹³⁸ Young's recommendation for a mandatory Polar Code came in 2017.

Joyner supported the application of the contemporary Law of the Sea to the protection of the Arctic. According to him, "the contemporary law of the sea will not fail in the Arctic. If failure does occur, it will lay with those governments who circumvent or undercut the law in order to exploit Arctic seas more extensively."¹³⁹ He also said:

Primary responsibility for the enforcement of international rules and standards in Arctic waters rests with flag state. Article 94 of the 1982 LOS Convention requires each state to effectively exercise its jurisdiction and control over ships flying its flag and to ensure that their flagged vessels take measures to ensure safety at sea.¹⁴⁰

There is no established mandatory or voluntary shipping routing system for the Arctic Marine Area.¹⁴¹ Byers mentioned the necessity of adopting designated shipping lanes to prevent collisions and of setting speed limits for vessels.¹⁴²

The entry of the Polar Code into force will improve the safety of navigation and protection of the marine environment in the Arctic.¹⁴³ The provisions of the Code will be enforced by flag states that are parties to SOLAS and MARPOL since these conventions incorporated the Code through annexes and amendments to the annexes. However, the ban on the use of heavy fuel oil in the Antarctic must be extended to the Arctic. Furthermore, discharge of grey water by cruise ships must be prohibited in the Polar regions.

Particularly Sensitive Sea Areas [PSSA] may be designated in the Arctic. A PSSA is defined as "an area that needs special protection through action by IMO because of its significance for recognized ecological, socio-economic or scientific reasons and because it may be vulnerable to damage by international shipping activities."¹⁴⁴ According to Article 211(6), when international rules and standards are inadequate to protect the marine environment from vessel source pollution in an EEZ of a State, the State may ask the IMO to designate the maritime area as a special area.¹⁴⁵ A PSSA allows application of more stringent IMO-approved regulatory rules such as routing measures and ship-reporting systems.¹⁴⁶

Although the Arctic states have adopted the 2011 Maritime Search and Rescue Agreement in order to assist each other in the event of a disaster, they still have not established adequate infrastructure for that purpose. For example, the United States

owns just two icebreakers in the Arctic Ocean.¹⁴⁷ Similarly, the U.S. withdrawal from the 2015 Paris agreement will weaken the fight against global warming which accelerates the melting of Arctic ice. The author believes that until after these problems have been eliminated, the current Law of the Sea rules in the Arctic are not adequate to protect the Arctic marine environment and maritime safety.

Notes

1. Michael T. Geiselhart, "The Course Forward for Arctic Governance," *Wash. U. Global Stud. L. Rev* 13 (2014), p. 157. The U.S. Congress has defined the Arctic as "all United States and foreign territory north of the Arctic Circle and all United States territory north and west of the boundary formed by the Porcupine, Yukon, and Kuskokwim Rivers; all contiguous seas, including the Arctic Ocean and the Beaufort, Bering, and Chukchi Sea; and the Aleutian chain." 15 U.S.C. § 4111 (2013).

2. Henry Huntington et al., "An Introduction to the Arctic Climate Impact Assessment," in *Arctic Climate Impact Assessment* (2004), p. 10.

3. *Ibid.*

4. *Ibid.*, p. 158. See J. Richter-Menge, J. E. Overland, and J. T. Mathis, eds., "Arctic Report Card 2016," <http://www.arctic.noaa.gov/Report-Card>, accessed November 1, 2018.

5. U.S. Geological Survey, "Circum-Arctic Resource Appraisal: Estimates of Undiscovered Oil and Gas North of the Arctic Circle," *USGS Fact Sheet 2008-3049* (2008).

6. Andrew Osborn, "Putin's Russia in Biggest Arctic Military Push Since Soviet Fall," *Arctic Now*, published January 30, 2017, <http://www.arcticnow.com/arctic-news/2017/01/30/putins-russia-in-biggest-arctic-military-push-since-soviet-fall/>, accessed November 1, 2018.

7. Geiselhart, 2014, p. 156.

8. Claudia Cinelli, "The Law of the Sea and the Arctic Ocean," *Arctic Review on Law and Politics* 2(1) (2011), p. 5.

9. Cinelli, *Ibid.*

10. Sukjoon Yoon, "A Cooperative Maritime Capacity-Sharing Strategy for the Arctic Region: The South Korean Perspective," in *Asia and the Arctic*, eds. V. Sakhuja and K. Narula (Singapore: Springer, 2016), p. 50.

11. "The Antarctic Treaty," Secretariat of the Antarctic Treaty, accessed 25 February 2017, <http://www.ats.aq/e/ats.htm>. Article IV (2), the Antarctic Treaty reads: No acts or activities taking place while the present Treaty is in force shall constitute a basis for asserting, supporting or denying a claim to territorial sovereignty in Antarctica or create any rights of sovereignty in Antarctica. No new claim, or enlargement of an existing claim to territorial sovereignty in Antarctica shall be asserted while the present Treaty is in force.

12. Yoon, 2016, p. 50.

13. *Ibid.*, p. 51.

14. *Ibid.*

15. United Nations Convention on the Law of the Sea, 10 December 1982, 1833 *UNTS* 397.

16. Arctic Ocean Conference, "The Ilulissat Declaration," (Greenland, 27–29 May 2008), <http://www.arcticgovernance.org/the-illulissat-declaration.4872424.html>, accessed November 1, 2018.

17. Hari M. Osofsky, Jessica Shadian and Sara L. Fechtelkötter, "Arctic Energy Cooperation," *University of California, Davis Law Review* 49 (2016), p. 1450.

18. "Declaration on the Establishment of the Arctic Council," adopted 19 September 1996, 35 *ILM* 1387.

19. Arctic Council, "The Arctic Council Secretariat," <http://www.arctic-council.org/index.php/en/about-us/arctic-council/the-arctic-council-secretariat>, last updated November 4, 2016, accessed November 1, 2018.

20. *Ibid.*

21. *Ibid.* "The Arctic Council should not deal with matters related to military security."

22. Arctic Council, "The Arctic Council: A Background," <http://www.arctic-council.org/index.php/en/about-us>, last updated September 13, 2018, accessed November 1, 2018.

23. Helga Haftendorn, "The Case for Arctic Governance—The Arctic Puzzle," *Institute of International Affairs* (2013), p. 19.
24. Osofsky, 2016, p. 1438.
25. Entered into force January 2013, <http://www.ifrc.org/docs/idrl/N813EN.pdf>.
26. Arctic Council, "Agreements," <http://www.arctic-council.org/index.php/en/our-work/agreements>, last updated May 25, 2017, accessed November 1, 2018.
27. Arctic Council, "Working Groups," <http://www.arctic-council.org/index.php/en/about-us/working-groups>, last updated September 10, 2015, accessed November 1, 2018.
28. Arctic Council, "Observers," <http://www.arctic-council.org/index.php/en/about-us/arctic-council/observers>, last updated January 17, 2018, accessed November 1, 2018.
29. *Ibid.* Nine intergovernmental and inter-parliamentary organizations have observer status: International Federation of Red Cross & Red Crescent Societies, International Union for the Conservation of Nature, Nordic Council of Ministers, Nordic Environment Finance Corporation, North Atlantic Marine Mammal Commission, Standing Committee of the Parliamentarians of the Arctic Region, United Nations Economic Commission for Europe, United Nations Development Program and United Nations Environment Program. *Ibid.* Also eleven non-governmental organizations act as observers in the Council: the Advisory Committee on Protection of the Seas, the Arctic Institute of North America, the Association of World Reindeer Herders, the Circumpolar Conservation Union, the International Arctic Science Committee, the International Arctic Social Sciences Association, the International Union for Circumpolar Health, the International Work Group for Indigenous Affairs, the Northern Forum, University of the Arctic, and the World Wide Fund for Nature-Global Arctic Program. *Ibid.*
30. *Ibid.*
31. *Ibid.*
32. Oran Young, "Arctic Governance—Future Pathways to the Future," *Arctic Review on Law and Politics* 1 (2) (2010), p. 170.
33. Arctic Council, "Permanent Participants," <https://www.arctic-council.org/index.php/en/about-us/permanent-participants>, last updated March 22, 2017, accessed November 1, 2018.
34. Article 234, LOSC declares that:
Coastal States have the right to adopt and enforce non-discriminatory laws and regulations for the prevention, reduction and control of marine pollution from vessels in ice-covered areas within the limits of the exclusive economic zone, where particularly severe climatic conditions and the presence of ice covering such areas for most of the year create obstructions or exceptional hazards to navigation, and pollution of the marine environment could cause major harm to or irreversible disturbance of the ecological balance. Such laws and regulations shall have due regard to navigation and the protection and preservation of the marine environment based on the best available scientific evidence.
35. Alexander Proelss and Till Müller, "The Legal Regime of the Arctic Ocean," *Heidelberg Journal of International Law* 68 (2008), pp. 684–685.
36. Article 123, LOSC provides that:
States bordering an enclosed or semi-enclosed sea should cooperate with each other in the exercise of their rights and in the performance of their duties under this Convention. To this end they shall endeavour, directly or through an appropriate regional organization:
(a) to coordinate the management, conservation, exploration and exploitation of the living resources of the sea;
(b) to coordinate the implementation of their rights and duties with respect to the protection and preservation of the marine environment;
(c) to coordinate their scientific research policies and undertake where appropriate joint programmes of scientific research in the area;
(d) to invite, as appropriate, other interested States or international organizations to cooperate with them in furtherance of the provisions of this article.
37. Article 7, LOSC is explained in the following parts.
38. Timo Koivurova and Erik J. Molenaar, "International Governance and Regulation of the Marine Arctic, Overview and Gap Analysis," *WWF International Arctic Programme* (2009), p. 14.
39. Marta Kolcz-Ryan, "An Arctic Race: How the United States' Failure to Ratify the Law of the Sea Convention Could Adversely Affect Its Interest in the Arctic," *University of Dayton Law*

Review 35 (1) (2009), p. 164. The 1994 Agreement Relating to the Implementation of Part IX of the LOSC modified the provisions of the LOSC regarding the deep seabed (Agreement relating to the implementation of Part XI of the United Nations Convention on the Law of the Sea, UNGA Resolution 48/263 of 28 July 1994). The 1994 Agreement was adopted to encourage developed States like the United States to ratify the LOSC because they were against the original provisions of the LOSC regarding the deep seabed.

40. The U.S. National Security and Strategic Imperatives for Ratification: Hearing on the Law of the Sea Convention Before the S. Comm. on Foreign Relations, 112th Cong. (2012) (statement of S. James M. Inhofe, Mem., S. Comm. on Foreign Relations) cited in James W. Houck, "The Opportunity Costs of Ignoring the Law of the Sea," *Arctic Hoover Institution, Stanford University* (2013).

41. See Steven Groves, "Accession to U.N. Convention on the Law of the Sea Would Expose the U.S. to Baseless Climate Change Lawsuits," *Heritage Foundation Backgrounder*, No. 2660 (March 12, 2012). The writer indicated that without ratifying the LOSC, there is no forum to initiate an international climate change lawsuit against the U.S.

42. Christopher C. Joyner, "The Legal Regime for the Arctic Ocean," *Journal of Transnational Law and Policy* (2009), p. 220.

43. *Ibid.*, p. 223.

44. Convention on the International Maritime Organization, adopted 6 March 1948, 289 UNTS 3.

45. International Maritime Organization, "Status of Treaties," accessed September 21, 2018, <http://www.imo.org/en/About/Conventions/StatusOfConventions/Documents/StatusOfTreaties.pdf>.

46. International Convention for the Safety of Life at Sea, adopted 1 November 1974, 1184 UNTS 237.

47. International Convention for the Prevention of Pollution from Ships, 2 November 1973 and 1978 Protocol of Amendment, 17 February 1978, 1226 UNTS 237, as amended.

48. Adopted 30 November 1990, entered into force 13 May 1995, 30 *ILM* 735.

49. Adopted 29 December 1972, entered into force 30 August 1975, 1046 UNTS 138.

50. International Convention Relating to Intervention on the High Seas in Cases of Oil Pollution Casualties, Adopted 29 November 1969, entered into force 30 March 1983, 970 UNTS 212.

51. "Status of Treaties," International Maritime Organization (September 21, 2018), <http://www.imo.org/en/About/Conventions/StatusOfConventions/Documents/StatusOfTreaties.pdf>, accessed on November 2, 2018.

52. International Maritime Organization, "International Convention for the Safety of Life at Sea (SOLAS), 1974," accessed on September 21, 2017, [http://www.imo.org/en/About/conventions/listofconventions/pages/international-convention-for-the-safety-of-life-at-sea-\(solas\)-1974.aspx](http://www.imo.org/en/About/conventions/listofconventions/pages/international-convention-for-the-safety-of-life-at-sea-(solas)-1974.aspx), accessed on November 2, 2018.

53. SOLAS, Annex, ch 1, Reg. 6.

54. SOLAS, Annex, ch 1, Reg. 19 reads:

Every ship holding a certificate issued under Regulation 12 or Regulation 13 of this chapter is subject in the ports of the other Contracting Governments to control by officers duly authorized by such Governments in so far as this control is directed towards verifying that there is on board a valid certificate. Such certificate shall be accepted unless there are clear grounds for believing that the condition of the ship or of its equipment does not correspond substantially with the particulars of that certificate. In that case, the officer carrying out the control shall take such steps as will ensure that the ship shall not sail until it can proceed to sea without danger to the passengers or the crew. In the event of this control giving rise to intervention of any kind, the officer carrying out the control shall inform the Consul of the country in which the ship is registered in writing forthwith of all the circumstances in which intervention was deemed to be necessary, and the facts shall be reported to the Organization.

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(a) Where the international rules and standards referred to in paragraph 1 are inadequate to meet special circumstances and coastal States have reasonable grounds for believing that a particular, clearly defined area of their respective exclusive economic zones is an area where the adoption of special mandatory measures for the prevention of pollution from vessels is required for recognized technical reasons in relation to its oceanographical and ecological conditions, as well as its utilization or the protection of its resources and the particular character of its traffic, the coastal States, after appropriate consultations through the competent international organization with any other States concerned, may, for that area, direct a communication to that organization, submitting scientific and technical evidence in support and information on necessary reception facilities. Within 12 months after receiving such a communication, the organization shall determine whether the conditions in that area correspond to the requirements set out above. If the organization so determines, the coastal States may, for that area, adopt laws and regulations for the prevention, reduction and control of pollution from vessels implementing such international rules and standards or navigational practices as are made applicable, through the organization, for special areas. These laws and regulations shall not become applicable to foreign vessels until 15 months after the submission of the communication to the organization.

(b) The coastal States shall publish the limits of any such particular, clearly defined area.

(c) If the coastal States intend to adopt additional laws and regulations for the same area for the prevention, reduction and control of pollution from vessels, they shall, when submitting the aforesaid communication, at the same time notify the organization thereof. Such additional laws and regulations may relate to discharges or navigational practices but shall not require foreign vessels to observe design, construction, manning or equipment standards other than generally accepted international rules and standards; they shall become applicable to foreign vessels 15 months after the submission of the communication to the organization, provided that the organization agrees within 12 months after the submission of the communication.

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Biographical Statements

Ekrem Korkut is a research specialist at Penn State Law. His research interests include law of the sea and public international law. He received his LL.M. and S.J.D. degrees at Pennsylvania State University.

Lara B. Fowler is a senior lecturer at Penn State Law and the assistant director of the Penn State Institutes of Energy and the Environment. She focuses on water, energy, and dispute resolution topics.

Legal Approaches to Dry Cargo Liquefaction: An Arctic Perspective on a Global Problem

Stefan Kirchner

Structured Abstract

Article Type: Research Paper

Purpose—The liquefaction of dry cargoes poses a serious threat to maritime safety. Dry cargo liquefaction is frequently the cause of loss of life at sea. This text aims at raising awareness of the utility of existing international law norms to contribute to disaster risk reduction (DRR) at sea in this particular context.

Design, Methodology, Approach—The topic is approached from a particular Arctic perspective as the Arctic Ocean is opening up for maritime traffic in ways never seen before.

Findings—By bringing together technical and legal aspects, the text provides the reader with insights into a challenging problem with high practical relevance for seafarers around the world, emphasizing the human dimension of the regulation of the use of maritime spaces.

Practical Implications—This approach highlights the practical importance of insurance providers and other actors for enhancing shipping safety. This role can be seen also in other aspects of shipping safety, for example with regard to oil pollution or passenger rights.

Originality, Value—At this time, it appears that Arctic-related seafarer training regimes are not yet taking the increased risk of Dry Cargo Liquefaction into account as a matter of course—nor is there a corresponding legal requirement *de lege lata*.

University of Lapland, Arctic Centre, P.O. Box 122, 96100 Rovaniemi, Finland; email: stefan.kirchner@ulapland.fi; Tel: +358 40 48 44 001



Journal of Territorial and Maritime Studies / Volume 6, Number 1 / Winter/Spring 2019 / pp. 85–95 / ISSN 2288-6834 (Print) / © 2018 Yonsei University

Nevertheless, awareness of Arctic conditions and risks can help increase awareness of specific Arctic risks among crew members. There are not specific DCL-related rules in the Polar Code but it learning about Arctic-specific risks can complement existing rules, such as those of the IMSBC Code, to enhance seafarer safety.

Keywords: Arctic, law, risk, safety, shipping

Introduction

The Problem

Dry Cargo Liquefaction (DCL) causes the deaths about seafarers every year and over the course of two decades more than 800 lives of seafarers were lost due to DCL.¹ Even though the problem has been known for more than a century,² it is still not completely researched, let alone solved. This text is intended to provide an Arctic perspective on the problem, which is particularly relevant in the context of the transport of raw materials which are also found in the Arctic, such as iron or nickel³ ore.

As global warming continues, shipping in the Arctic Ocean is predicted to increase. This has consequences not only for the Arctic environment,⁴ but also for seafarers.⁵ Already today, shipping routes which were long thought impenetrable, such as the Northwest Passage,⁶ are used on a regular basis. Especially the Northern Sea Route along the Russian Arctic coast is already today used for regular cargo transport as well as for the transport of natural gas and other resources. Compared to traditional shipping routes, e.g., from East Asia to Europe through the Suez Canal, let alone around Africa, Arctic shipping routes offer significant financial savings.⁷ Although shipping in the Arctic region is undergoing rapid changes,⁸ it must not be ignored that fundamental dangers associated with shipping continue to remain relevant even in times of increasing reliance on technology.⁹ Although it can be assumed that fully automatic vessels will cause a revolution in shipping similar to that which followed the introduction of standardized containers,¹⁰ for the time being the human factor in shipping is not to be underestimated.

The transport of potentially dangerous goods, such as nickel, by sea is likely to increase in the Arctic as the Arctic Ocean is becoming more accessible. In particular, the nickel mine operating by Nornickel (formerly Norilsk Nickel) in the Russian city of Nickel as well as other mines on the Kola peninsula are likely candidates for nickel transports by ship. Increasing interest by the international shipping industry in the Barents region increases the likelihood of ship-based nickel transports in the Arctic. This in turn increases the likelihood of DCL events which can endanger the lives of seafarers.

That transport by ship remains dangerous is often forgotten by consumers. Every day, seafarers risk their health and their lives to ensure the continued functioning of the global economy. By entering the Arctic region, this risk is only increasing. In this text, the particular threat posed by dry cargo liquefaction will be used as a starting point for an investigation into the possibilities provided by what can

be referred to as the “The Human Dimension of the Polar Code,”¹¹ i.e., the training requirements created by the Polar Code and amendments to the STCW Convention, including the STCW Code, including both the 2010 Manila Amendments and new changes due to the entry into force of the Polar Code. It is the aim of this text to raise awareness among those working in the Arctic of this particular risk to human life, the natural environment and property in the Arctic.

Physics

While containers dominate the public perception of international shipping, raw materials are still often transported in bulk. As of 2010, 38 percent of the tonnage of the global merchant fleet (532 dwt) was devoted to such dry bulk shipping.¹² Ideally, assuming correct documentation by everybody concerned, the master and crew of a container vessel will know the weight and content of containers. While this is often not the case (as has been highlighted, e.g., by the fire on the *BBC Arizona* in the port of Valdez, Alaska, in 2013¹³), under ideal circumstances the crew will know the weight distribution on board their vessel. When transporting granular bulk cargo, there is no such certainty because the cargo can shift when it gets wet: “A combination of the water content, dynamic energy produced by the waves and the vessels [*sic*] engine along with the material itself would cause the granular bulk cargo to liquefy.”¹⁴ As a result, cargo which was loaded in a dry form “behaves like a fluid,”¹⁵ sloshing around in the cargo hold and causing instability of the vessel.¹⁶ Stability is a key safety issue in shipping.¹⁷ This is a problem not only but especially in geographical areas which experience extreme weather events because “the movement of the cargo in a carrier’s hold would dramatically weaken the stability of the carrier, even cause it to capsize under some rough seas.”¹⁸

Technical Approaches

Among the technical approaches suggested to limit the risk of destabilization of ships are the idea that “a longitudinal baffle is recommended to be mounted in the cargo hold”¹⁹ or that “Ultralight Honeycomb Cargo Hold Separators”²⁰ are used to limit the destabilizing effects of liquefied granular cargo on a vessel. In recent years, there have been a number of studies on this problem,²¹ in particular regarding non-Newtonian fluids of an “incompressible and inelastic”²² nature and which a “flow [which is] laminar and isothermal,”²³ as is the case, e.g., with a mix (or “slurry”²⁴) of nickel ore and water.²⁵

An alternative approach is to keep the cargo dry to begin with as “reducing the degree of saturation of cargos will enormously improve the stability of the cargo ship during transportation.”²⁶ Humidity can enter dry cargo, e.g., during loading,²⁷ prior to loading during storage in ports or transport to ports, or during the voyage, e.g., if cargo hold hatches or doors are not closed properly. It is noteworthy that Dry Cargo Liquefaction is a particularly serious problem in some South South-East Asian countries known for humid climates, which export iron (India) or nickel or (such

as the Philippines, Indonesia but also New Caledonia).²⁸ Given that relevant materials, such as nickel, are also found in the Arctic, it appears necessary to raise awareness also in this geographical context. In order to prevent liquefaction, it is essential “that the transportable moisture limit (TML) and moisture content of cargoes must be accurately detected before shipment, and the moisture content should be under the TML.”²⁹

Regulatory Approaches

The IMSBC Code

One attempt to achieve this is through the International Maritime Solid Bulk Cargoes Code (IMSBC Code). The IMSBC Code has been included in Chapter VI and Chapter VII Part A1 of the International Convention for the Safety of Life at Sea³⁰ (SOLAS) and is legally binding since 1 January 2011.³¹ The idea behind the IMSBC Code and its predecessor, the Code of Safe Practice for Solid Bulk Cargoes (BC Code), is to reduce risk through regulation. While insurance providers may impose their own standards and provide information,³² the IMSBC Code is the closest to true international legal regulation regarding the problem of Dry Cargo Liquefaction. That said, “[i]t should be noted that other international and national regulations exist and that those regulations may recognize all or part of the provisions of this Code [and that] port authorities and other bodies and organizations should recognize the Code and may use it as a basis for their storage and handling bye-laws within loading and discharge areas.”³³

The IMSBC Code includes rules for the transport of “solid bulk cargoes, which are considered to be potentially liquefiable,”³⁴ including tests of the moisture content of the cargo in order to determine if there is a risk of liquefaction³⁵: “The IMSBC Code infers the TML is the maximum Gross water content (GWC) that a cargo may contain without being at risk of liquefying,”³⁶ i.e., “a percentage of the moisture divided by the wet mass instead of the moisture divided by the dry mass.”³⁷ This is an important piece of information for those who are handling cargoes such as nickel or iron ore³⁸ prior to or during loading it on a vessel because “the GWC of a material is not as commonly used in geotechnical engineering as the Net Water Content (NWC).”³⁹ It is not necessary for the cargo to be fully saturated in order to cause liquefaction.⁴⁰ Raising awareness of potential risks for seafarers at a later stage of the process from mining to customer already at an early stage can therefore contribute to reducing risks down the line, e.g., by ensuring that ores are protected against rainfall during storage or transport to a vessel.

The Polar Code

In recent years, more regulatory work has been done to address this significant threat to human life,⁴¹ although it has been noted that this development is based

“almost entirely [on] empirical considerations, a fact implying the lack of a fundamental theoretical framework of the problem.”⁴² In the last few years, this number of new publications have delved deeper into the scientific questions underlying the problem of Dry Cargo Liquefaction. This increase in scientific knowledge also allows the international legal community to no longer simply react to problems but to look at potentials for the utilization of other (existing) legal tools for the improvement of seafarer safety in this particular context. In the following it will be argued that, although not directly aimed at the problem at hand, both the Polar Code and seafarer training can contribute in this regard.

General Remarks

The Polar Code entered into force on 1 January 2017. It is a legally binding instrument which has been created under the auspices of the International Maritime Organization (IMO) and which operates in the frameworks of both the International Convention for the Prevention of Pollution from Ships⁴³ (MARPOL) and SOLAS.⁴⁴ It is designed “to enhance maritime safety, training and environmental protection in the polar regions. It consists of two parts, each of which includes both mandatory and recommendatory sections,”⁴⁵ regulating both vessels and seafarers. While international shipping law is predominantly technical in nature, the human aspects of shipping are not to be underestimated. Even though its geographical scope does not include significant maritime areas which are located in the wider Arctic, e.g., the waters off Iceland, Norway and the Aleutian Islands,⁴⁶ it is quickly becoming an important tool for the improvement of shipping safety.

The idea behind the Polar Code “is to provide for safe ship operation and the protection of the polar environment by addressing risks present in polar waters and not adequately mitigated by other instruments of the [International Maritime Organization].”⁴⁷ While Dry Cargo Liquefaction is no specific polar problem, the Polar Code can be utilized to combat the risk of Dry Cargo Liquefaction.

The Polar Code addresses different kinds of dangers, such as the environment,⁴⁸ “rapidly changing and severe weather conditions, with the potential for escalation of incidents,”⁴⁹ “[i]ce, as it may affect hull structure, stability characteristics, machinery systems, navigation”⁵⁰ and aspects of vessel operations,⁵¹ frozen ship surfaces,⁵² cold temperatures,⁵³ long periods of light or darkness,⁵⁴ effects of high latitudes⁵⁵ and remoteness⁵⁶ and the lack of polar shipping experience among crew members⁵⁷ and of emergency equipment and services (Polar Code, Introduction, para. 3.8), by “includ[ing] improvements to charting, ice and weather forecasting, communications and maritime domain awareness.”⁵⁸ Obviously, ice features prominently in discussions concerning polar shipping risks.⁵⁹ This also leads to a focus on charting⁶⁰ and, because it “is limited in polar waters[, the Polar Code] requires additional navigation equipment so that ships can know where the ice is.”⁶¹ Such situational awareness is also relevant for other features of the Arctic shipping environment, for example extreme weather phenomena, such as storms, which can accelerate the effects of liquefaction on the stability of vessels.⁶²

Situational awareness can be created through training⁶³ as well as through the Polar Water Operational Manual (PWOM).⁶⁴ While the Polar Code does not address the problem of Dry Cargo Liquefaction *expressis verbis*, it contributes to the understanding of seafarers, especially seafarers without prior Arctic experience, of the conditions of shipping the polar regions. Overall, shipping in the Arctic requires more information about the Arctic and its particular dangers.⁶⁵ This includes the training requirements envisaged in the Polar Code.

Seafarer Training and the Polar Code

Among the human elements of the Polar Code is the requirement for adequate training,⁶⁶ which will require amendments to the STCW Convention.⁶⁷ According to para. 12.1 of the Polar Code it is the goal of the Polar Code's training and manning requirements "to ensure that ships operating in polar waters are appropriately manned by adequately qualified, trained and experience personnel."⁶⁸ Specifically, "companies shall ensure that masters, chief mates and officers in charge of a navigational watch on board ships operating in polar waters shall have completed training to attain the abilities that are appropriate to the capacity to be filled and duties and responsibilities to be taken up, taking into account the provision of the STCW Convention and the STCW Code, as amended."⁶⁹ Because of scheduling problems at the IMO, the training requirements will only enter into force on 1 January 2018.⁷⁰

While the new training requirements do not include a liquefaction-prevention element, polar navigation training is meant to provide seafarers with some of the skills necessary to deal with common issues in Arctic and Antarctic waters. The training leads to the Basic Polar Waters Certificate of Proficiency and the Advanced Polar Waters Certificate of Proficiency. The requirements for such certifications, however, might not so as far as one could expect: while "no sea service is required"⁷¹ for the Basic Polar Waters Certificate of Proficiency, the Advanced Polar Waters Certificate of Proficiency requires two months of service at sea.⁷² Interestingly, this practical experience may be gained outside polar waters in "approved equivalent waters."⁷³ As a result it will be possible to obtain at least the Basic Polar Waters Certificate of Proficiency without having spent a single moment in an Arctic or Antarctic environment. This is rightly seen as a grave problem or, in the words of David (Duke) Snider, "the most flagrant gap in Polar Code/STCW training and certification."⁷⁴ Given the particular dangers of shipping in the Arctic, such as cold temperatures, the presence of ice in the water, long periods of light or darkness⁷⁵ and in light of the likely lack of local experience among many seafarers, this training regime falls short of the practical needs associated with shipping in polar regions. This can be dangerous in particular as Arctic shipping is becoming more normal: with an increasing number of trips in the Arctic, seafarers operating in the Arctic for the first time might be given a false sense of security.

Today, first courses are offered, e.g., in Finland.⁷⁶ Prior experiences in areas which have sea ice for part of the year, for example in the Baltic Sea region, can also be utilized for the effective implementation of the Polar Code.⁷⁷

Polar Seafarer Training and Dry Cargo Liquefaction

The polar navigation training is not meant to address issues concerning Dry Cargo Liquefaction—but it can be utilized to raise awareness among seafarers of the enhanced dangers they are likely to encounter in the Arctic Ocean.

Given that the training requirements of the Polar Code and the future STCW amendments appear to be far from complete, “[s]ome operators, insurers and other agencies are looking for standards above the present Polar Code requirements. In particular, the Nautical Institute is continuing to pursue implementation of its Ice Navigator Training Accreditation and Ice Navigator Certification schemes. These schemes are intended to complement the requirements of the Polar Code and fill the gap, putting in place a recognized level of certification that ensures officers meet basic and advanced levels of skill in handling ships in ice, whether inside or outside polar waters.”⁷⁸

A Role for Non-State Actors

This approach highlights the practical importance of insurance providers and other actors for enhancing shipping safety. This role can be seen also in other aspects of shipping safety, for example with regard to oil pollution⁷⁹ or passenger rights.⁸⁰ While flag states and international bodies such as the IMO play an important role in regulating international shipping, the fundamental international legal principle of the freedom of navigation on the high seas continues to have a restraining effect when it comes to the direct regulation of shipping. Indirect regulation through technical and other requirements which are imposed by insurance providers on the other hand have significant effects on improving shipping safety.

Such effects can also be seen in the field of bulk cargo transport safety because insurance companies do not limit themselves to imposing technical standards on their customers. As they have an obvious economic interest in preventing disasters, insurance providers often conduct their own research and make information on ways to reduce the likelihood of DCL events available to their customers (and often online through the public at large). By raising awareness of DCL risks and ways to prevent their realization, insurance providers therefore contribute to reducing the likelihood of future losses of life and vessels. In the case of navigating in polar waters, these industry standards go a step further: “Once in place, the schemes will accredit training institutions that meet the Polar Code/STCW requirements and address additional needs to ensure competence and proficiency in operating vessels in ice-infested waters. The accompanying certification scheme will measure individuals against a known and common standard of proficiency and competence.”⁸¹

Concluding Remarks

The international law of the sea is cognizant of the interests of states as well as of non-state entities.⁸² In particular the Law of the Sea Convention is universal in its approach.⁸³ The interests of seafarers have only gained more attention in recent years, most notably with the Maritime Labor Convention (MLC). International shipping law tends to be reactive, with the international community responding to lessons learned as a result of accidents, etc.,⁸⁴ be it through “best practices”⁸⁵ or binding legal norms, although disproportionate attention appears to be given to event affecting developed countries. The human side of shipping has been given more attention in the wake of the *Costa Concordia* disaster while valuable lessons on marine contamination in the Arctic have been learned after the *Exxon Valdez* oil spill.

When it comes to increasing the safety of seafarers, though, international legal standards alone are not sufficient to provide optimal results. Both navigation in polar waters and the problem of Dry Cargo Liquefaction illustrate the shortcomings of the *lex lata*. Limited functional regulation means that there is an increased need for practical solutions. This is particularly the case in the Arctic Ocean. The low number of vessels traveling in the area (and the likelihood that natural gas or finished products rather than bulk cargo are being transported) means that very little attention has been paid to the problem. Arctic weather patterns, storms and waves, increase the risk of vessels capsizing as a result of liquefaction. At this time, it appears that Arctic-related seafarer training regimes are not yet taking the increased risk of Dry Cargo Liquefaction into account as a matter of course—nor is there a corresponding legal requirement *de lege lata*. Nevertheless, awareness of Arctic conditions and risks can help increase awareness of specific Arctic risks among crew members. There are not specific DCL-related rules in the Polar Code but learning about Arctic-specific risks can complement existing rules, such as those of the IMSBC Code, to enhance seafarer safety in an often-overlooked part of international shipping which is also bound to remain relevant in the Arctic Ocean for the foreseeable future.

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Biographical Information

Stefan Kirchner is an associate professor of Arctic Law at the University of Lapland in Rovaniemi. He is an adjunct professor of Fundamental and Human Rights at the same university and regularly teaches law of the sea as an associate professor at Vytautas Magnus University in Kaunas. In the current academic year, he is a visiting professor for EU Oceans and Arctic Law and Policy and for EU Environmental Policy at V.N. Karazin University in Kharkiv.

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Journal of Territorial and Maritime Studies / Volume 6, Number 1 / Winter/Spring 2019 / pp. 96-99 /
ISSN 2288-6834 (Print) / © 2018 Yonsei University

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Book

1. Robert Jervis, *The Meaning of the Nuclear Revolution: Statecraft and the Prospect of Nuclear Armageddon* (Ithaca, NY: Cornell University Press, 1989), p. 167.

2ND ENDNOTE

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Footnote

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Structured Abstract Samples

SAMPLE 1

Article Type: Research Paper

Purpose—Some scholars imprint an academic discipline by their contribution to the manner in which people think and research, namely, by putting forward novel concepts and insights. The purpose of this paper is to examine the impact of Sumantra Ghoshal’s work on the study of subsidiaries and multinational enterprises and organizational formats for foreign operations.

Design, Methodology, Approach—A bibliometric study on Bartlett and Ghoshal’s well-known book *Managing Across Borders: The Translational Solution* is performed to assess its impact in international business (IB) research. The entire record of publications in the top leading IB journal, Journal of International Business Studies (JIBS), is examined.

Findings—Theoretically supported, Ghoshal’s work was keenly influenced by his corporate experiences and his constant questioning of the dominant theories and assumptions. The analyses in this paper show the impact of the work on the “transnational solution,” namely, on the understanding of multinationals and subsidiaries, thus being one of the most notable contributions for IB research over the past 20 years.

Practical Implications—Useful for graduate students and in writing a literature review, this paper presents an interesting manner to examine a scholar’s and a theory’s impact on a discipline.

Originality, Value—This paper presents an extensive bibliometric analysis of research published over a time-span of 22 years in international business studies.

SAMPLE 2

Article Type: Research Paper

Purpose—While many studies on institutional environment have primarily focused on the influence of the host country environment, limited insights have been offered on how the different dimensions of home institutions affect firm internationalization. This paper aims to fill this gap by investigating the effects of regulatory institutions at home.

Design, Methodology, Approach—Using country governance quality to proxy quality of regulatory institutions, this study attempts to reveal how regulatory institutions at home facilitate a multinational enterprise’s (MNE’s) international expansion and why the influence differs in different country clusters. Using hierarchical linear modeling and cluster analysis, proposed hypotheses were tested with a three-year panel 511 firms from 38 countries.

Findings—The results provide substantial support for authors’ hypotheses that

MNEs with high governance quality at home are more engaged in internationalization than those with low governance quality at home. Moreover, differences in institutional effect do exist between country clusters.

Practical Implications—This study provides evidence that while country difference exists, governance quality at home can facilitate MNE's expansion into foreign markets. This finding will help managers of any MNEs to consider country-level factors and evaluate the governance quality at home before committing resources into foreign operations.

Originality, Value—Building on the institutional environment literature, this theory and results make original contributions by underscoring how the consideration of regulatory institutions at home can significantly improve understanding of institutional influence on MNEs. The findings have important implications for both international business researchers and managers of MNEs.