

Revisiting the Thames Formula: The Evolving Role of the International Maritime Organization and Its Member States in Implementing the 1982 Law of the Sea Convention

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Despite the findings that marine casualty rates have “plummeted” and the safety record of the oil transport industry has “significantly improved,”¹ high visibility pollution incidents in the last decade like those involving the tankers *Erika*² and *Prestige*³ off the coast of Europe, together with the chronic problems of illegal and unregulated fishing and dismal labor conditions for many seafarers led a United Nations-chartered consultative group of leading international organization representatives to conclude that there is an “urgent” need to improve State performance in the

1. The Secretary-General, *Oceans and the Law of the Sea: Consultative Group on Flag State Implementation*, paras. 11, 21, delivered to the General Assembly, U.N. Doc. A/59/63 (Mar. 5, 2004), corrected by Corrigendum, U.N. Doc. A/59/63/Corr.1 (Mar. 21, 2005).

2. The *Erika* broke up off the coast of France in 1999 while carrying over 31,000 tons of heavy fuel oil. The 24 year old Italian-owned vessel was built in Japan, registered in Malta, chartered by a French company, classed by an Italian classification society and crewed by Indians. Later findings about her badly deteriorated condition sparked European efforts to accelerate the phase out of single-hulled tankers.

3. The *Prestige* broke in two off the coast of Spain in 2002 while carrying some 77,000 tons of oil, creating the largest environmental disaster in Spanish history. The tanker was twenty-six years old, owned by a Liberian corporation, registered in the Bahamas, classed by the American Bureau of Shipping and operated by a Greek company and commanded by a Greek master.

implementation and enforcement of the international maritime legal regime.⁴ There is less agreement, however, in how to go about improving implementation and enforcement, given the problem's multifaceted political, legal, environmental, economic, social and institutional dimensions. For some, the solution lies in better defining and enforcing the international requirement for a "genuine link" between flag States and their vessels, while also providing greater transparency of the true vessel ownership and control interests.⁵ For others, they key is to provide technical and financial assistance to needy States, to help them develop the capacity to carry out their obligations under international maritime law. Expanding the jurisdiction of States other than the flag State (port States, coastal States and others with the capacity to take enforcement action) provides at least a partial solution for some. Still others would turn to the international courts or empower one or more global or regional international organizations to assume an auditing and/or enforcement role against States that fail to meet their international obligations. To weigh the merits of these and other reform proposals it is necessary first to identify the causes of the current problem and the context provided by the present legal regime established by the 1982 United Nations Convention on the Law of the Sea (LOS Convention),⁶ together with the pervasive role of the International Maritime Organization (IMO),⁷ as

4. See Int'l Mar. Org. Secretary-General, *Report of the Ad Hoc Consultative Meeting of Senior Representatives of International Organizations on the "Genuine Link,"* para. 4, U.N. Doc. A/61/160 Annex (July 17, 2006).

5. Transparency and accuracy of vessel (and cargo) ownership and control interests has taken on added significance as the IMO's remit expanded into maritime security matters.

6. United Nations Convention on the Law of the Sea, Dec. 10, 1982, 1833 U.N.T.S. 3 [hereinafter LOS Convention]. The convention and its Part XI Implementation Agreement entered into force on Nov. 16, 1994. See Agreement Relating to the Implementation of Part XI of the United Nations Convention on the Law of the Sea of 10 December 1982, July 28, 1994, S. TREATY DOC. NO. 103-39, 1836 U.N.T.S. 41.

7. Because competency over the international rules applicable to vessels is distributed among several IOs and relies so heavily on flag States to implement and effectively enforce those rules, the present approach has actually led to three critical shortfalls: (1) ineffective implementation and enforcement of the IMO-sponsored instruments, leading to increased risk to maritime safety, security and the marine environment; (2) ineffective implementation and enforcement of the International Labour Organization-sponsored instruments, leading to increased risk to and a diminished quality of life for seafarers; and (3) ineffective implementation and enforcement of the Food and Agriculture Organization-sponsored instruments for conservation and management of living marine resources (i.e., the Implementation Agreement on Straddling and Highly Migratory Fish Stocks, FAO Compliance Agreement and FAO Code of Conduct), leading to a higher incidence of illegal, unreported, and unregulated

confirmed and expanded by the LOS Convention and other international instruments developed under IMO auspices.

I. INTRODUCTION: THE “THAMES FORMULA” AND ITS WEAK LINK

International measures to promote safe, secure and efficient shipping on clean oceans—the core mission of the IMO—began well before the IMO opened its doors or the later work on the 1982 LOS Convention was completed.⁸ Treaties establishing uniform vessel collision prevention rules date back to the nineteenth century.⁹ Merchant vessel construction, design and equipment standards were the subject of multilateral conventions as early as 1914.¹⁰ The first international convention aimed at preventing vessel-source oil pollution was adopted in 1954.¹¹ The recognition that safe ships are an indispensable requirement for clean seas, and that all nations must join in efforts to promote both goals if we are to be successful, is interwoven throughout the 1982 LOS Convention. Yet, even while uniform international prescriptions were under progressive development, the 1982 LOS Convention locked in what I have elected to label the “Thames Formula” (an allusion to the London riverside location of the IMO)¹²—a regulatory approach that assigns to flag States the primary obligation to implement the conventions and police compliance by vessels flying their flag. The wisdom of that formula is increasingly subject to doubt, at least without the infusion of significant confidence building measures.

In this first decade of the twenty-first century global trends signal the complexity and persistence of the maritime safety and security and

(IUU) fishing and other unsustainable fishing practices. For reasons of time and economy, this article will focus on only the first problem.

8. See Int’l Mar. Org. [IMO], Strategic Plan for the Organization (for the Six-Year Period 2008 to 2013), IMO Res. A.989(25), Annex, para. 1.1 (Nov. 20, 2007) [hereinafter IMO Strategic Plan (2008–2013)].

9. See David R. Owen, *The Origins and Development of Marine Collision Law*, 51 TUL. L. REV. 759, 784 (1977) (describing bilateral and multilateral agreements on collision prevention dating from 1863).

10. The 1914 London conference, which produced the first International Convention for the Safety of Life at Sea, followed by two years the tragic allision and foundering of RMS *Titanic* with the attendant loss of over 1,500 passengers and crew.

11. International Convention on the Prevention of Pollution of the Sea by Oil, May 12, 1954, 12 U.S.T. 2989, 327 U.N.T.S. 3 [hereinafter OILPOL].

12. More specifically, by “Thames Formula” I mean the balance struck among the respective roles, rights and obligations of flag States, coastal States and port States and international organizations (IOs) by the 1982 LOS Convention and the family of marine safety, security and environmental protection conventions developed under the auspices of the International Maritime Organization. From its offices on the banks of the River Thames, the IMO has operated in accordance with the frequently cited “balance of interests” reflected in the LOS Convention (and its 1958 predecessor conventions), while also adapting to new ocean uses and effects.

pollution prevention challenge. The modern era is characterized by continued growth in the number, size, speed and technological sophistication of vessels,¹³ to meet the rapidly growing need for sea-borne transport to supply the goods and energy demanded by an integrated global economy that is increasingly dependent on inexpensive, just-in-time logistics.¹⁴ Those goods and energy products include liquid, liquefied and gaseous petroleum products, packaged and bulk hazardous cargoes and radioactive substances. Oil tankers and gas carriers share the waterways with ever larger cruise ships and high speed passenger ferries. Moreover, as global populations become more urbanized and concentrated along coastal regions, their vulnerability to the consequences of shipping related accidents in the adjacent waters increases.

And yet, even as vessel size and sophistication grows, the manning levels on those vessels are being reduced, leading to fatigue and a declining quality of life for the world's professional mariners.¹⁵ Those mariners are expected to master a suite of constantly evolving technological components while, on occasion: repelling attacks by pirates, avoiding violence at the hands of seagoing criminal syndicates engaged in trafficking of narcotics, illicit weapons and even humans, and meeting the needs of and risks posed by stowaways and migrants, refugees and other persons rescued at sea. When one also considers the concentration

13. According to the U.N. Conference on Trade and Development (UNCTAD), the 2007 global ship inventory was just short of 650,000 commercial vessels totaling over one billion deadweight tons (an 8.6 percent increase over 2006). U.N. Conference on Trade & Dev. [UNCTAD], *Review of Maritime Transport 2007*, at 23, 31, U.N. Doc. UNCTAD/RMT/2007, available at http://www.unctad.org/en/docs/rmt2007_en.pdf. With the launch of the 11,000 TEU, 157,000 DWT, *Emma Maersk* in late 2006, some of the world's waterways were expected to accommodate container ships nearly 400 meters in length, with 56 meter beams and 16 meter drafts. These "E" class mega-container ships have a service speed of 25.5 knots. See *More About Emma*, MARINE LOG, Aug. 24, 2006, <http://www.marinelog.com/DOCS/NEWSMMVI/2006aug00241.html>.

14. More than 8,200 vessels from over 80 nations arrive in the United States each year. The vast majority are foreign flag. See U.S. COAST GUARD, PORT STATE CONTROL IN THE UNITED STATES: ANNUAL REPORT 2007, at 2, available at <http://homeport.uscg.mil> (follow "Port State Control" hyperlink; then follow "General Information" hyperlink; then follow "PSC Annual Report (1998–Present)" hyperlink to "2007 Annual Report" hyperlink). Thus, the United States' roles in maritime safety and security are chiefly that of a port State, a coastal State, a cargo State, and a State whose nationals sail as passengers on ships, the safety and security of which are primarily in the hands of some other State.

15. For example, the 400 meter (1300 ft.) "E" class container ships described above will have a crew of thirteen. See David Petraiko, *Nautelex*, SEAWAYS, Oct. 2006, at 28.

of the merchant fleet under the registries of flag of convenience (FOC) States, some of which are unable or unwilling to exercise effective jurisdiction and control over vessels flying their flags, the situation understandably alarms maritime risk analysts. The IMO, along with other engaged international organizations such as the International Labour Organization, has, to some extent, stepped into that breach. So far, however, neither international organization has directly challenged the principle of flag State primacy which undergirds the Thames Formula.

To provide the background essential to evaluating the remedies proffered to address the current “flag State problem,” the first part of this article focuses on the role of States and the IMO under the LOS Convention and the various complementary conventions developed under the auspices of the IMO.¹⁶ It begins by examining the role of the IMO as one of the “competent international organizations” under the LOS Convention and as the forum for cooperation in the development of international rules and standards for vessel safety, security and pollution prevention. The article then turns to an examination of the respective roles of flag States, coastal States and port States in promoting vessel safety, security and pollution prevention, before examining the nature and causes of the failure by some flag States to effectively exercise the jurisdiction and control necessary to meet their obligations under the LOS Convention and the IMO-sponsored conventions. It then examines the effect on flag State primacy¹⁷ in jurisdiction and control of the growing devolution of prescriptive responsibility to the IMO and the growing use of liberal “tacit acceptance” treaty amendment provisions,¹⁸

16. For an examination of these relationships, see IMO, *Implications of the United Nations Convention on the Law of the Sea, 1982 for the International Maritime Organization (IMO): Study by the Secretariat of the IMO*, IMO Doc. LEG/MISC.1 (1986), updated by IMO documents LEG/MISC.2 (Oct. 6, 1997), LEG/MISC.3/Rev.1 (Jan. 6, 2003), LEG/MISC.4 (2004), LEG/MISC.5 (Jan. 31, 2007), and LEG/MISC.6 (Sept. 10, 2008) [hereinafter *Implications of the LOS Convention for the IMO*].

17. The term “primacy” is used advisedly. Flag State jurisdiction over vessels while on the high seas is generally characterized as “exclusive.” See LOS Convention, *supra* note 6, art. 92(1). Exclusive flag State jurisdiction has as its corollary the qualified principle of non-interference by States other than the flag State. See, e.g., *id.* art. 110(1). Close reading of the relevant articles reveals that both principles are subject to exceptions in the LOS Convention and other treaties. Moreover, when the vessel enters another State’s coastal waters or ports it comes within the concurrent jurisdiction of that State.

18. To address historical obstacles in amending existing conventions, the IMO member States began to incorporate “tacit acceptance” amendment provisions into their principal safety and pollution prevention conventions beginning in the late 1970s. Those provisions generally provide that “technical” amendments to the underlying treaty enter into force unless a prescribed fraction of States (typically one-third) objects to the amendment. In the absence of an objection, States parties to the underlying convention are deemed to have tacitly accepted the amendment. See William Tetley, *Uniformity of*

when accompanied by the transfer of enforcement responsibilities to classification societies, port States and those States “willing and able” to carry out high seas enforcement activities pursuant to bilateral boarding agreements. The second part of the article examines the various remedial concepts and initiatives designed to address the current flag State implementation and enforcement deficit.

II. THE RELATIONSHIP BETWEEN THE IMO AND THE UNITED NATIONS

The emerging role of international organizations as “lawmaking” bodies was extensively described in the American Society of International Law study on *The United Nations Legal Order*.¹⁹ That report distinguishes between the specialized agencies of the United Nations and other international organizations.²⁰ The authors conclude that some of those specialized agencies, including the IMO, exercise technical amendment powers under the tacit acceptance procedure that can be described as “quasi-legislative.”²¹ Those quasi-legislative powers can be found in both the LOS Convention, which assigns functions to “competent international organizations,” and in the family of treaties developed under the auspices of the IMO.

The IMO traces its origins to the 1926 Vienna Conference of the International Law Association, the United Maritime Authority (established

International Private Maritime Law—The Pros, Cons, and Alternatives to International Conventions—How to Adopt an International Convention, 24 TUL. MAR. L.J. 775, 817–19 (2000). Although the matter is debatable, the better view is that a State party that objects to a treaty amendment is not bound by that amendment even if the amendment becomes a “generally accepted international standard” within the meaning of the 1982 LOS Convention. The rationale is that the specific terms of the underlying IMO convention control over the more general provisions in the LOS Convention to conform to generally accepted international rules and standards. See Agustin Blanco-Bazán, *IMO Interface with the Law of the Sea Convention*, in CURRENT MARITIME ISSUES AND THE INTERNATIONAL MARITIME ORGANIZATION 269 (Myron H. Nordquist & John Norton Moore eds., 1999), available at http://www.imo.org/InfoResource/mainframe.asp?topic_id=406&doc_id=1077.

19. 1 THE UNITED NATIONS LEGAL ORDER (Oscar Schachter & Christopher Joyner eds., 1995); 2 *id.*; see also JAMES P. MULDOON JR., THE ARCHITECTURE OF GLOBAL GOVERNANCE: AN INTRODUCTION TO THE STUDY OF INTERNATIONAL ORGANIZATIONS (2003); C.F. AMERASINGHE, PRINCIPLES OF INSTITUTIONAL LAW OF INTERNATIONAL ORGANIZATIONS (2d ed. 2005).

20. See Frederic L. Kirgis, Jr., *Specialized Law-Making Processes*, in 1 UNITED NATIONS LEGAL ORDER, *supra* note 19, at 109.

21. *Id.* at 121; see also Frederic L. Kirgis, Jr., *Shipping*, in 2 UNITED NATIONS LEGAL ORDER, *supra* note 19, at 715.

in 1944), the United Maritime Consultative Council (1946), and the Provisional Maritime Consultative Council (1947).²² The IMO was chartered as the Inter-governmental Consultative Organization (IMCO) in 1959, when its organic treaty of 1948 entered into force.²³ IMCO was the first global international organization with competency over marine affairs and marine environmental protection. IMCO, which changed its name to the International Maritime Organization in 1982, subsequently became a “specialized agency” in the U.N. system by entering into an agreement under Article 57 of the U.N. Charter.²⁴ As of August 2008, the IMO had 168 member States. In addition, more than forty intergovernmental organizations (IGOs) have entered into agreements of cooperation with the IMO and some sixty-five non-government organizations (NGOs) have been granted observer status.²⁵ The Organization’s most recent strategic plan proclaims that:

The mission of the International Maritime Organization (IMO) as a United Nations specialized agency is to promote safe, secure, environmentally sound, efficient and sustainable shipping through co-operation. This will be accomplished by adopting the highest practicable standards of maritime safety and security, efficiency of navigation and prevention and control of pollution from ships, as well as through consideration of the related legal matters and effective implementation of IMO’s instruments with a view to their universal and uniform application.²⁶

22. The same year the Chicago Convention established the International Civil Aviation Organization (ICAO). See Convention on International Civil Aviation, Dec. 7, 1944, 61 Stat. 1180, 15 U.N.T.S. 295.

23. Convention on the Intergovernmental Maritime Consultative Organization, Mar. 6, 1948, 9 U.S.T. 621, 289 U.N.T.S. 48 [hereinafter IMO Convention].

24. The IMO’s role as a specialized agency is critically examined in Ademun-Odeke, *From the “Constitution of the Maritime Safety Committee” to the “Constitution of the Council”: Will the IMCO Experience Repeat Itself at the IMO Nearly Fifty Years On? The Juridical Politics of an International Organization*, 43 TEX. INT’L L.J. 55 (2007).

25. See IMO, Relations with Non-Governmental Organizations, IMO Res. A.1009(25) (Nov. 29, 2007). As part of its strategic planning efforts to increase transparency and participation, the IMO now assesses the level of participation by IGOs and NGOs at IMO meetings. See IMO Strategic Plan (2008–2013), *supra* note 8, tbl.1, Indicator 17. Flag State attendance at meetings of the principal IMO committees and the Assembly are factored into the Flag State Performance Table assessment by the Round Table of International Shipping Organizations (BIMCO, International Chamber of Shipping, International Shipping Federation, Intercargo, and Intertanko). See BIMCO ET AL., SHIPPING INDUSTRY GUIDELINES ON FLAG STATE PERFORMANCE (2d ed. 2006), available at <http://www.marisec.org/flag-performance/flag-performance.pdf> [hereinafter GUIDELINES ON FLAG STATE PERFORMANCE]; BIMCO ET AL., SHIPPING INDUSTRY FLAG STATE PERFORMANCE TABLE: 2007 UPDATE (2007), available at <http://www.marisec.org/flag-performance/FlagStatePerformanceTable07.pdf> [hereinafter FLAG STATE PERFORMANCE TABLE 2007].

26. IMO Strategic Plan (2008–2013), *supra* note 8, Annex, para. 1.1.

The IMO's structure follows the familiar international IGO model, with an Assembly consisting of all member States, a Council elected by the Assembly and a Secretariat, which operates under the direction of the Organization's Secretary-General. Much of the work of the IMO is carried out in its principal committees, including the Maritime Safety Committee (MSC),²⁷ Marine Environment Protection Committee (MEPC),²⁸ Legal Committee (LEG),²⁹ Technical Co-operation Committee (TCC)³⁰ and, to a lesser extent, the Facilitation Committee (FAL).³¹ Through its committees and subcommittees, the IMO seeks to facilitate cooperation among the member States on technical and legal matters relating to international shipping. In addition, through its three dedicated "universities," the IMO provides a global forum for teaching and research in international maritime law and policy.³²

As a specialized agency of the United Nations, the IMO works closely with the U.N. Secretariat. Each year, the IMO submits a report to the U.N. Secretary-General describing its undertakings for the year. The IMO report is appended to the Secretary-General's annual law of the sea report to the General Assembly,³³ and is available for consideration in the annual U.N. Open-ended Informal Consultative Process on Ocean

27. The Maritime Safety Committee (MSC) is responsible for work on the safety of navigation, radio communications, life-saving arrangements, search and rescue, ship design and equipment, fire protection, standards of training and watchkeeping, containers and cargoes, including the carriage of dangerous goods.

28. The Marine Environment Protection Committee (MEPC) is responsible for IMO work on the prevention and control of marine pollution (but not liability for marine pollution incidents, which comes within the competence of the Legal Committee).

29. The Legal Committee (LEG) has competency over any legal matters within the charter of the IMO and the preparation of draft legal instruments for the Council.

30. The Technical Co-operation Committee (TCC) establishes directives and guidance documents for use by developing States in matters of marine transport. It also works closely with the IMO's three maritime training facilities.

31. The IMO's Facilitation Committee (FAL) is responsible for the related FAL Convention. *See* Convention on Facilitation of International Maritime Traffic, Apr. 9, 1965, 18 U.S.T. 411, 591 U.N.T.S. 265 [hereinafter FAL Convention]. Effective December 7, 2008, FAL became the IMO's fifth fully institutionalized committee.

32. The IMO sponsors the World Maritime University in Malmö, Sweden, the International Maritime Law Institute in Malta, and the International Maritime Academy in Trieste, Italy.

33. Copies are available at U.N. Div. for Ocean Affairs & the Law of the Sea, Reports of the Secretary-General, http://www.un.org/Depts/los/general_assembly/general_assembly_reports.htm (last visited Feb. 13, 2009). *See generally* Tullio Treves, *The General Assembly and the Meeting of States Parties in the Implementation of the LOS Convention, in STABILITY AND CHANGE IN THE LAW OF THE SEA: THE ROLE OF THE LOS CONVENTION* 55 (Alex G. Oude Elferink ed., 2005).

Affairs and Law of the Sea (UNICPOLOS).³⁴ The Secretary-General's annual report has become an important source of information on contemporary State (and international organization) practice on the law of the sea. The IMO also serves as the depositary for most vessel safety and vessel-source pollution prevention conventions.³⁵

The following sections examine the IMO's evolving role in maritime safety, security and environmental stewardship. In approaching those materials it might be useful for the reader to conceptualize the Organization's development in four phases: the early years, from the Organization's inception in 1959 up to the 1978 International Conference on Tanker Safety and Pollution Prevention; the intermediate period, from 1978 to the emergence of the port State control programs in 1994; a third phase stretching from 1994 to September 11, 2001; and the modern phase, which finds the Organization's remit expanded well beyond its traditional role in facilitating the development of maritime safety and pollution prevention prescriptions.

III. THE IMO'S ROLE AS A FORUM WHERE STATES MAY SATISFY THEIR DUTY TO COOPERATE

Despite its sweeping 320 articles, nine annexes, and two implementation agreements, the 1982 LOS Convention is widely viewed as a "constitutive" instrument that provides a legal framework that will be filled in, rounded out and complemented by additional international agreements and customary international law.³⁶ To further develop that law, the LOS

34. Following the recommendation of the Commission on Sustainable Development, the General Assembly, by its resolution 54/33 of November 24, 2000, established the United Nations Open-ended Informal Consultative Process on Oceans and the Law of the Sea (UNICPOLOS). Consistent with the legal framework provided by the LOS Convention and the goals of chapter 17 of Agenda 21, the consultative process was established to facilitate the review by the General Assembly of developments in ocean affairs and the law of the sea by considering the annual reports of the Secretary-General on oceans and the law of the sea. The consultative process also identifies areas where coordination and cooperation at the intergovernmental and inter-agency levels should be enhanced. *See generally* U.N. Div. for Ocean Affairs & the Law of the Sea, United Nations Open-ended Informal Consultative Process on Oceans and the Law of the Sea, http://www.un.org/Depts/los/consultative_process/consultative_process.htm (last visited Feb. 13, 2009); Louise de La Fayette, *The Role of the United Nations in International Oceans Governance, in THE LAW OF THE SEA: PROGRESS AND PROSPECTS* 63 (David Freestone et al. eds., 2006).

35. *See* IMO, *Status of Multilateral Conventions and Instruments in Respect of Which the International Maritime Organization or its Secretary-General Performs Depositary or Other Functions*, http://www.imo.org/includes/blastDataOnly.asp/data_id%3D24908/Status-2008.pdf (last visited Feb. 26, 2009).

36. *See, e.g.*, LOS Convention, *supra* note 6, pmb.; *id.* art. 311; *see also* William T. Burke, *State Practice, New Ocean Uses, and Ocean Governance Under UNCLOS, in OCEAN GOVERNANCE: STRATEGIES AND APPROACHES FOR THE 21ST CENTURY* 219, 222

Convention is replete with references to the duty of States to cooperate with each other to promote common objectives regarding uses of the seas.³⁷ Nowhere is that more apparent than in Part XII of the convention, which addresses measures to protect the marine environment.³⁸ The International Tribunal for the Law of the Sea characterizes the duty to cooperate as a “fundamental principle” in the prevention of pollution of the marine environment under Part XII.³⁹ The articles in Part XII demonstrate both breadth and balance. The convention defines marine pollution broadly, while also calling for an integrated approach to protecting the marine environment.⁴⁰ It provides a flexible international

(Thomas A. Mensah ed., 1996) (cautioning that interpretations of the LOS Convention should be constitutive; that the convention is “broad not narrow, flexible not rigid, and adaptive in orientation, not fixed on the past”); HAROLD D. LASSWELL & MYRES S. MCDUGAL, 2 JURISPRUDENCE FOR A FREE SOCIETY pt. IV, ch. 1 (1992) (principles of the constitutive process). The LOS Convention preamble expressly saves application of customary law. Similarly, article 311 saves application of other international agreements that are “compatible with” the LOS Convention. *See also id.* art. 293. Article 311 permits agreements by two or more LOS Convention parties that modify or suspend application of the LOS Convention. On the difference between a treaty amendment and a modification, see Vienna Convention on the Law of Treaties art. 41, May 23, 1969, 1155 U.N.T.S. 331.

37. A duty to cooperate was also imposed by articles 1 and 4 of the 1958 Convention on Fishing and Conservation of the Living Resources of the High Seas, Apr. 29, 1958, 17 U.S.T. 138, 559 U.N.T.S. 285. For a variety of viewpoints on the nature and scope of the duty to cooperate, see Kevin W. Riddle, *Illegal, Unreported, and Unregulated Fishing: Is International Cooperation Contagious?*, 37 OCEAN DEV. & INT'L L. 265 (2006); Robin Churchill & Joanne Scott, *The MOX Plant Litigation: The First Half-Life*, 53 INT'L & COMP. L.Q. 643 (2004); and Anne Peters, *International Dispute Settlement: A Network of Operational Duties*, 14 EUR. J. INT'L L. 1 (2003) (analyzing the duty of cooperation analysis in the *Southern Bluefin Tuna* dispute).

38. *See, e.g.*, LOS Convention, *supra* note 6, art. 197. A case can be made that the duty to cooperate in the conservation and management of living marine resources is now just as pervasive. *See id.* arts. 62–67, 118.

39. *See* MOX Plant (Ir. v. U.K.), 126 I.L.R. 259, para. 82 (Int'l Trib. L. of the Sea 2001), available at http://www.itlos.org/case_documents/2001/document_en_197.pdf. The tribunal went on to order the parties to cooperate. *Id.* para. 89. Earlier, in the *Southern Bluefin Tuna* case, the tribunal seemed to suggest that the obligation to cooperate implies a duty to negotiate until an agreement is reached. *See* Southern Bluefin Tuna (Austl. v. Japan; N.Z. v. Japan), 117 I.L.R. 148, paras. 48, 78, 90 (Int'l Trib. L. of the Sea 1999), available at http://www.itlos.org/case_documents/2001/document_en_116.pdf.

40. LOS Convention, *supra* note 6, art. 1(4) (“‘pollution of the marine environment’ means the introduction by man, directly or indirectly, of substances or energy into the marine environment, including estuaries, which results or is likely to result in such deleterious effects as harm to living resources and marine life, hazards to human health, hindrance to marine activities, including fishing and other legitimate uses

framework within which existing or subsequently enacted treaties governing vessel safety and marine environmental protection can be implemented globally. The convention specifically preserves and complements existing international agreements respecting protection and preservation of the marine environment.⁴¹ It requires States to take measures necessary to protect and preserve fragile ecosystems, as well as the habitats for depleted, threatened, or endangered species.⁴² By establishing general guidelines within which nations may prescribe more detailed rules and standards and assigning enforcement responsibility and authority, the LOS Convention permits the international legal regime for the oceans to evolve, as it must if it is to meet changing environmental needs and take advantage of new technologies.

The LOS Convention imposes an obligation on all States to protect and preserve the marine environment.⁴³ States are required to take all necessary measures to prevent, reduce, or control pollution of the marine environment using the “best practicable means at their disposal and in accordance with their capabilities.”⁴⁴ Such measures must extend to all sources of marine pollution, including not only vessels but also land-based and atmospheric sources, seabed activities, and offshore facilities. In addressing the problem of vessel-source pollution, the convention allocates jurisdiction and responsibility for enforcing vessel safety and pollution prevention rules and standards among flag States,⁴⁵ coastal States,⁴⁶ and port States.⁴⁷

of the sea, impairment of quality for use of sea water and reduction of amenities”); *see also id.* art. 194(3) (listing classes of covered pollutants).

41. *See id.* art. 237.

42. *Id.* art. 194(5).

43. *Id.* art. 192 (“States have the obligation to protect and preserve the marine environment.”). Note that the convention does not restrict the duty to States that are party to the LOS Convention. *Cf. id.* art. 1(2) (defining “States Parties” as those States which have consented to be bound by the Convention and for which the Convention is in force, thereby providing independent meaning to the unqualified term “States”).

44. *Id.* art. 194.

45. *Id.* art. 217. As used herein, the “flag State” is the State which grants to a vessel the right to fly the State’s flag, whether by grant of nationality or by registration of the ship in the flag State’s territory (the regime for bareboat charter registries is beyond the scope of this article). *Id.* art. 91. In IMO conventions, flag State responsibilities are typically assigned to the relevant “Administration” of the State. Surprisingly, some of the papers produced by the IMO suggest that the flag State’s legal relationship to non-public vessels registered in the State is one of “sovereignty,” rather than of jurisdiction and control. Although it may be accurate to characterize a State’s relationship to its warships and other government vessels not engaged in commercial service as one that approaches “sovereignty,” such is not the case with non-public vessels.

46. *Id.* art. 220. A “coastal State” is the State adjacent to an area of water over which it exercises some level of jurisdiction or control with respect to the waters and resources, vessels and activities within those waters.

Under the 1982 LOS Convention, each State has the sovereign right to explore and exploit the natural resources in its adjacent coastal waters, subject to the shared obligation to protect and preserve the marine environment.⁴⁸ The obligation requires each State to undertake measures to ensure its coastal activities are conducted in a manner that avoids damage to the marine environment of adjacent States.⁴⁹ All States are also required to adopt and enforce measures to prevent, reduce, and control ocean dumping.⁵⁰ Measures adopted must be at least as effective of those established by generally accepted international standards.⁵¹ In managing waste disposal issues nations cannot simply transfer wastes to other areas or transform one type of pollutant into another.⁵² The convention thus promotes waste reduction and elimination. States must also take measures to guard against introducing alien species into an environment in which the species was formerly unknown, a common problem arising from the discharge of ships' ballast water and the transfer of nonindigenous organisms attached to vessel hulls.⁵³

Even the best prevention and control measures may fail. Accordingly, Article XII of the LOS Convention calls for international cooperation in

47. *Id.* art. 218. With respect to regulating vessels, "port States" are distinguished from coastal States by the fact that the vessel involved has voluntarily entered a port, offshore terminal or the internal waters of the State.

48. *Id.* art. 193. This duty extends to all activities under the State's "jurisdiction or control." *Id.* art. 194(2).

49. *Id.* art. 194(2).

50. *Id.* art. 210. "Dumping" is defined in article 1(1)(5), which excludes disposal of ship-generated wastes. Ocean dumping within the territorial sea, exclusive economic zone or on the continental shelf may not be carried out without the express prior approval of the coastal State. This restriction was raised in response to plans to dispose of unwanted drill or production rigs by sinking them offshore. *See id.* art. 1(1)(5) (definition of "dumping" includes deliberate disposal of ships, aircraft, platforms or other man-made structures at sea). The question is directly addressed in article 1 of the 1996 Protocol to the London Convention, which adds to the definition "any abandonment or toppling at site of platforms or other man-made structures at sea, for the sole purpose of deliberate disposal." 1996 Protocol to the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, 1972 and Resolutions Adopted by the Special Meeting, Nov. 7, 1996, S. TREATY DOC. NO. 110-5, 36 I.L.M. 1 (1997). The 1996 Protocol entered into force March 24, 2006.

51. LOS Convention, *supra* note 6, art. 210(6). At the minimum this would include the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, Dec. 29, 1972, 26 U.S.T. 2403, 1046 U.N.T.S. 120 [hereinafter London Convention]. Because the 1996 Protocol has just over 30 Contracting States, it is doubtful that its provisions presently qualify as "generally accepted" standards.

52. LOS Convention, *supra* note 6, art. 195.

53. *Id.* art. 196.

spill notification, contingency planning and response, technical assistance, and environmental monitoring and assessment.⁵⁴ The LOS Convention response planning provisions are now complemented by the 1990 International Convention on Oil Pollution Preparedness, Response and Cooperation (OPRC).⁵⁵ The LOS Convention also reaffirms the authority of coastal nations to intervene in marine casualties occurring in waters beyond their territorial sea when necessary to abate actual or threatened pollution damage to their coastline or related interests.⁵⁶

Although vessel-source oil discharges now constitute only a small fraction of the overall marine pollution problem, vessel spills attract intense public and government interest.⁵⁷ It should therefore come as no surprise that the LOS Convention devotes substantial attention to vessel-source pollution and the various roles of the flag State, coastal State and port State in prescribing and enforcing rules to prevent such pollution (while paying far less attention to terrestrial sources of marine pollution).⁵⁸ Current prescriptive and enforcement efforts extend well

54. *Id.* arts. 197–206.

55. International Convention on Oil Pollution Preparedness, Response and Cooperation, Nov. 30, 1990, S. TREATY DOC. NO. 102-11, 1891 U.N.T.S. 51 (1991) [hereinafter OPRC]. The OPRC Convention, which entered into force May 13, 1995, addresses international cooperation and mutual assistance, pollution reporting, oil pollution emergency plans, research and development, and oil spill preparedness and response. It is supplemented by a 2000 Protocol for incidents involving hazardous and noxious substances.

56. LOS Convention, *supra* note 6, art. 221(1). The right of a coastal State to intervene in the adjacent waters dates back to the 1969 International Convention Relating to Intervention on the High Seas in Cases of Oil Pollution Casualties, Nov. 29, 1969, 26 U.S.T. 765, 970 U.N.T.S. 211, as supplemented by the 1973 Protocol Relating to Intervention on the High Seas in Cases of Marine Pollution by Substances Other than Oil, Nov. 2, 1973, 34 U.S.T. 3407, 1313 U.N.T.S. 3.

57. Reports by GESAMP, the Joint Group of Experts on the Scientific Aspects of Marine Environmental Protection, over the years generally reveal that vessel-source operational and accidental pollution is declining and that land-based and atmospheric emissions are the primary sources of marine pollution. *See generally* Joint Group of Experts on the Scientific Aspects of Marine Environmental Protection [GESAMP], *Estimates of Oil Entering the Marine Environment from Sea-Based Activities*, Rep. Stud. GESAMP No. 75 (2007). In its 2008 report, the Congressional Research Service found that, while imports and consumption of oil have increased, the amount of oil spilled (particularly from ships) has decreased. On a volumetric basis, oil transportation now accounts for only four percent of the oil discharged in the United States. JONATHAN RAMSEUR, *OIL SPILLS IN U.S. COASTAL WATERS: BACKGROUND, GOVERNANCE, AND ISSUES FOR CONGRESS* (Cong. Research Serv., CRS Report for Congress Order Code RL 33705, Feb. 5, 2008).

58. The 1982 LOS Convention—which repeatedly speaks of “prevention, reduction and control” of marine pollution—does little to address standards for prescribing or enforcing pollution *liability* measures or requirements for certificates of financial liability. *See* LOS Convention, *supra* note 6, art. 229 (“Nothing in this Convention affects the institution of civil proceedings in respect of any claim for loss or damage resulting from pollution of the marine environment.”); *id.* art. 235 (stating States

beyond the vessel operational and accidental oil pollution focus that dominated the LOS Convention negotiations, and now include vessel-source atmospheric pollution, toxic anti-fouling ship coatings,⁵⁹ ballast water discharge management and control,⁶⁰ bio-fouling of ship hulls and greenhouse gas emissions.⁶¹ How the prescriptive and enforcement responsibility is distributed is today the subject of lively debate, both in the context of the LOS Convention and under contemporary State practice.

As the following sections will describe more fully, the LOS Convention assigns the primary responsibility for enforcing vessel-source pollution regulations to flag States.⁶² However, the Convention grants coastal States jurisdiction to adopt laws consistent with international rules and standards and to enforce those laws against foreign vessels in order to protect their adjacent marine environment.⁶³ Coastal State jurisdiction over foreign flag vessels is most extensive when the vessel voluntarily enters (or is en route to) a port or an offshore terminal of the coastal State. Under these circumstances, the "port State" may even regulate a foreign vessel's design and construction standards, subject to restrictions that might be imposed by some other

shall cooperate in implementation and development of international law relating to compensation and compulsory insurance).

59. IMO, International Convention on the Control of Harmful Anti-Fouling Systems on Ships [AFS Convention], Oct. 1–5, 2001, *Adoption of the Final Act of the Conference and Any Instruments, Recommendations and Resolutions Resulting from the Work of the Conference*, IMO Doc. AFS/CONF/25 (Oct. 8, 2001). The AFS Convention entered into force on Sept. 17, 2008.

60. Ballast water management and control measures are the subject of the 2004 International Convention for the Control and Management of Ships' Ballast Water and Sediments (BWM Convention). The convention will enter into force 12 months after ratification by 30 States, which collectively represent at least 35 percent of world merchant shipping tonnage. As of August 31, 2008, only 14 States had ratified the convention, leaving its future in doubt. *See generally* Jeremy Firestone & James J. Corbett, *Coastal and Port Environments: International Legal and Policy Responses to Reduce Ballast Water Introductions of Potentially Invasive Species*, 36 OCEAN DEV. & INT'L L. 291 (2005).

61. *See* IMO, IMO Policies and Practices Related to the Reduction of Greenhouse Gas Emissions from Ships, IMO Res. A.963(23) (Dec. 5, 2003). IMO actions to address GHG emission reduction and control are ongoing. *See* Efthimios E. Mitropoulos, *IMO's Vital Role in Reducing GHG Emissions from Ships*, IMO NEWS, No. 2, 2008, at 4. The Organization recently announced that its World Maritime Day theme for 2009 will be climate change.

62. LOS Convention, *supra* note 6, art. 217.

63. *Id.* art. 220.

convention, such as IMO's International Convention on the Safety of Life at Sea (SOLAS).⁶⁴

In addition to the marine pollution issues discussed above, the IMO has become the forum for problems as diverse as: search and rescue, the welfare of mariners,⁶⁵ marine casualty investigations,⁶⁶ provisions for "places of refuge" for vessels in need of a sheltered location to effect temporary repairs,⁶⁷ the respective State responsibilities for the safe recovery and disposition of migrants, refugees and other persons rescued at sea,⁶⁸ piracy and maritime armed robbery,⁶⁹ stowaways,⁷⁰ maritime

64. *Id.* art. 211(3), (4); International Convention for the Safety of Life at Sea, Nov. 1, 1974, 32 U.S.T. 47, 1184 U.N.T.S. 2 [hereinafter SOLAS]; Protocol of 1978 Relating to the International Convention for the Safety of Life at Sea, 1974, Feb. 17, 1978, 32 U.S.T. 5577, 1226 U.N.T.S. 237.

65. IMO & Int'l Labour Org., Adoption of Guidelines on Fair Treatment of Seafarers in the Event of Maritime Accidents, IMO Res. LEG.3(91), IMO Doc. LEG 91/12 Annex 2 (Apr. 27, 2006).

66. IMO, Code for the Investigation of Marine Casualties and Incidents, IMO Res. A.849(20) (Nov. 27, 1997), amended by IMO Res. A.884(21) (Nov. 25, 1999). At its 84th Session (May 2008), the Maritime Safety Committee adopted a new Code of International Standards and Recommended Practices for a Safety Investigation into a Marine Casualty or Marine Incident (Casualty Investigation Code). IMO, *Casualty-Related Matters: Code of the International Standards and Recommended Practices for a Safety Investigation into a Marine Casualty or Marine Incident*, IMO Doc. MSC-MEPC.3/Circ.2 (June 13, 2008). Parts I and II of the Code were made mandatory through a new Regulation 6 in SOLAS chapter XI-1 (and will thereby expand SOLAS ch. 1, reg. 21).

67. See PLACES OF REFUGE FOR SHIPS: EMERGING ENVIRONMENTAL CONCERNS OF A MARITIME CUSTOM (Aldo Chircop & Olof Linden eds., 2006); see also U.S. COAST GUARD, COMMANDANT INSTRUCTION 16451.9: U.S. COAST GUARD PLACES OF REFUGE POLICY (2007), available at http://www.uscg.mil/directives/ci/16000-16999/CI_16451_9.PDF.

68. The initiative, which followed the August 2001 incident involving the M/V *Tampa's* recovery of over 400 Afghan refugees off the coast of Australia, was coordinated with the U.N. High Commissioner for Refugees (UNHCR). See IMO, Review of Safety Measures and Procedures for the Treatment of Persons Rescued at Sea, IMO Res. A.920(22) (Nov. 29, 2001). It led to amendments to the SOLAS and Search and Rescue Conventions in 2006. See International Convention on Maritime Search and Rescue, Apr. 27, 1979, T.I.A.S. No. 11,093, 1405 U.N.T.S. 97; Convention Relating to the Status of Refugees, July 28, 1951, 19 U.S.T. 6259, 189 U.N.T.S. 137, amended by Protocol Relating to the Status of Refugees, Jan. 31, 1967, 19 U.S.T. 6223, 606 U.N.T.S. 267; see also IMO, Guidelines on the Treatment of Persons Rescued at Sea, IMO Res. MSC.167(78), IMO Doc. MSC 78/26/Add.2 Annex 34 (May 20, 2004); IMO & Office of the United Nations High Comm'r for Refugees, RESCUE AT SEA: A GUIDE TO PRINCIPLES AND PRACTICE AS APPLIED TO MIGRANTS AND REFUGEES (2006).

69. See IMO, Measures to Prevent and Suppress Piracy and Armed Robbery Against Ships, IMO Res. A.738(18) (Nov. 4, 1993); IMO, Code of Practice for the Investigation of the Crimes of Piracy and Armed Robbery Against Ships, IMO Res. A.922(22) (Nov. 29, 2001).

70. See IMO, Guidelines on the Allocation of Responsibilities to Seek the Successful Resolution of Stowaway Cases, IMO Res. A.871(20) (Nov. 27, 1997).

trafficking in drugs, psychotropic substances and precursor chemicals,⁷¹ ship-breaking, recycling and disposal,⁷² liability for injuries to passengers,⁷³ wreck removal,⁷⁴ polar navigation,⁷⁵ and even large-scale ocean fertilization projects designed to combat global warming.⁷⁶ Difficult questions regarding the respective roles of flag, coastal and port States, as well as the IMO, were common in many of those undertakings.

71. IMO, Guidelines for the Prevention and Suppression of the Smuggling of Drugs, Psychotropic Substances and Precursor Chemicals on Ships Engaged in International Maritime Traffic, IMO Res. A.872(20) (Nov. 27, 1997); IMO, Revision of the Guidelines for the Prevention and Suppression of the Smuggling of Drugs, Psychotropic Substances and Precursor Chemicals on Ships Engaged in International Traffic, IMO Res. A.985(24) (Dec. 1, 2005).

72. IMO, Guidelines on Ship Recycling, IMO Res. A.962(23) (Dec. 5, 2003); IMO, Amendments to the IMO Guidelines on Ship Recycling, IMO Res. A.980(24) (Dec. 1, 2005). Consistent with its “cradle to grave” approach to ships, the Organization has been developing a convention on ship recycling. A draft text was completed by the MEPC in the fall of 2008 and is tentatively scheduled for presentation to a diplomatic conference in Hong Kong from May 11–15, 2009. IMO, Ship Recycling, http://www.imo.org/environment/mainframe.asp?topic_id=818 (last visited Feb. 13, 2009).

73. See Athens Convention Relating to the Carriage of Passengers and Their Luggage by Sea, Dec. 13, 1974, 1463 U.N.T.S. 19; Protocol to the Athens Convention Relating to the Carriage of Passengers and Their Luggage by Sea, Nov. 19, 1976, 1545 U.N.T.S. 339 (1977); Protocol of 1990 to Amend the Athens Convention Relating to the Carriage of Passengers and Their Luggage by Sea, Mar. 29, 1990, IMO Doc. LEG/CONF.8/10 (not in force); Protocol of 2002 to Amend the Athens Convention Relating to the Carriage of Passengers and Their Luggage by Sea, Nov. 1, 2002, IMO Doc. LEG/CONF.13/20 (not in force).

74. See Nairobi International Convention on the Removal of Wrecks, May 18, 2007, 46 I.L.M. 697 (not in force). The U.S. delegation was so concerned about the clear lack of consensus regarding several of the convention’s provisions that it took the unusual step of submitting a statement for the record. See Charles D. Michel, *Introductory Note to the Nairobi International Convention on the Removal of Wrecks*, 46 I.L.M. 694 (2007).

75. IMO Mar. Safety Comm. [MSC] & Marine Env’t Prot. Comm. [MEPC], *Guidelines for Ships Operating in Arctic Ice-Covered Waters*, IMO Doc. MSC/Circ.1056 MEPC/Circ.399 (Dec. 23, 2002) (currently under review, with a view to amendment); IMO, Guidelines on Voyage Planning for Passenger Ships Operating in Remote Areas, IMO Res. A.999(25) (Nov. 29, 2007).

76. See *Large-scale Ocean Fertilization Not Currently Justified*, IMO NEWS, No. 1, 2008, at 13 (joint scientific Statement of Concern endorsed by parties to the London Conventions on Dumping); IMO, *Ocean Fertilization: Report of the Legal and Intersessional Correspondence Group on Ocean Fertilization (LICG)*, IMO Doc. LC 30/4 (July 25, 2008) (prepared by the United Kingdom).

IV. THE RELATIONSHIP BETWEEN THE LOS CONVENTION AND THE IMO-SPONSORED CONVENTIONS

The LOS Convention serves as a “framework” convention that was designed to be applied in conjunction with other international agreements and customary international law. Several important IMO conventions serve that “fleshing out” role, including the SOLAS Convention mentioned earlier,⁷⁷ along with the International Convention for the Prevention of Pollution by Ships (MARPOL),⁷⁸ the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW),⁷⁹ and a dozen or so more specialized conventions. In most cases, the LOS Convention and the related agreements operate in harmony with each other. Where potential or actual conflicts develop, however, the LOS Convention provides that other international agreements that are not “compatible” with the LOS Convention must give way.⁸⁰ It goes without saying that conclusions regarding “compatibility” might well vary; perhaps from State to State, between a given State and an IO, and

77. SOLAS, *supra* note 64. In response to President Clinton’s Regulatory Reinvention Initiative, the U.S. Coast Guard embarked on a program in 1995 to modify its regulations on navigational safety and marine engineering in order to harmonize them with international standards such as SOLAS, and to allow fuller use of new technologies. See Presidential Regulation Review, 60 Fed. Reg. 28,376 (May 31, 1995); Harmonization with International Safety Standards, 61 Fed. Reg. 58,804 (proposed Nov. 19, 1996) (to be codified at 33 C.F.R. pt. 155).

78. International Convention for the Prevention of Pollution from Ships, Nov. 2, 1973, 12 I.L.M. 1319, *amended by* Protocol of 1978 Relating to the International Convention for the Prevention of Pollution from Ships, Feb. 17, 1978, 17 I.L.M. 546 (1978) [hereinafter MARPOL]. The 1973 Convention and 1978 Protocol entered into force Oct. 2, 1983. MARPOL Annexes I and II were amended and reorganized, effective Jan. 1, 2007. See IMO Res. MEPC.117(52), IMO Doc. MEPC 52/24/Add.2 Annex 2 (Oct. 15, 2004); IMO Res. MEPC.118(52), IMO Doc. MEPC 52/24/Add.1 Annex 6 (Oct. 15, 2004).

79. International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, July 7, 1978, S. EXEC. DOC. EE, 96-1, 1361 U.N.T.S. 190 [hereinafter STCW]. The STCW Convention entered into force Apr. 28, 1984. Significant changes to the Convention were adopted at the 1995 STCW Conference. See 1995 Amendments to the Annex of the Convention on Standards of Training, Certification and Watchkeeping for Seafarers, July 7, 1995, S. TREATY. DOC. NO. 96-1, C.T.I.A. No. 7624. The STCW Convention and Code are undergoing a comprehensive review, with a diplomatic conference tentatively scheduled for 2010. See *STCW Review Moves Ahead*, IMO NEWS, No. 2, 2008, at 16.

80. See LOS Convention, *supra* note 6, arts. 293, 311. “Special conventions with respect to the protection and preservation of the marine environment come within the scope of article 237, not 311.” See 5 UNITED NATIONS CONVENTION ON THE LAW OF THE SEA 1982: A COMMENTARY 243 (Myron H. Nordquist et al. eds., 1989) [hereinafter UNCLOS COMMENTARY]. Additionally, Article 51(1) of the LOS Convention assigns priority to certain preexisting agreements regarding archipelagic waters. LOS Convention, *supra* note 6, art. 51(1).

from one regional or global IO to another. Fortunately, the annual UNICPOLOS process and the LOS Convention's dispute resolution provisions provide venues for addressing such disputes.⁸¹

The IMO has led the way in analyzing the relationship between the LOS Convention and the instruments developed under the Organization's auspices. Its most recent study, reported in a 2007 document that spans more than 100 pages, examined four distinct areas.⁸² First, it provided a general commentary the legal framework relating to the LOS Convention and IMO instruments. It then turned to a detailed analysis of the relationships between those instruments. It next examined the role of the IMO in settling disputes in light of the LOS Convention provisions. Finally, it considered the scope of IMO activities since the LOS Convention entered into force and the possibilities and prospects for modifying or extending the IMO's functions and responsibilities. The report is supplemented by two annexes. The first contains a list of IMO treaties and IMO Assembly resolutions that relate in some way to the LOS Convention, and the second tabulates the relationship between the articles of the LOS Convention and relevant IMO instruments. The IMO report is complemented by similar information and analysis compiled by the U.N. Secretariat's Division for Ocean Affairs and the Law of the Sea.⁸³

V. THE IMO'S ROLE AS A COMPETENT INTERNATIONAL ORGANIZATION UNDER THE LOS CONVENTION

The LOS Convention generally recognizes two fora for developing complementary international agreements: diplomatic conferences and "competent international organizations" (CIOs).⁸⁴ The former are ad hoc meetings among concerned States and other stakeholders and generally focus on a single subject. By contrast, CIOs are standing international organizations that offer their participating members

81. International Tribunal for the Law of the Sea (ITLOS) Judge Tullio Treves, among others, has on several occasions urged that wider use be made of ITLOS to resolve marine law questions, noting that the Tribunal's jurisdiction is not strictly limited to LOS Convention issues. See LOS Convention, *supra* note 6, art. 288(2).

82. See *Implications of the LOS Convention for the IMO*, *supra* note 16.

83. See OFFICE OF LEGAL AFFAIRS, U.N. DIV. FOR OCEAN AFFAIRS & THE LAW OF THE SEA, *THE LAW OF THE SEA: OBLIGATIONS OF STATES PARTIES UNDER THE UNITED NATIONS CONVENTION ON THE LAW OF THE SEA AND COMPLEMENTARY INSTRUMENTS*, U.N. Sales No. E.04.V.5 (2004).

84. See, e.g., LOS Convention, *supra* note 6, art. 211.

institutional expertise, a professional secretariat and the benefits of longer term relationships among the diplomatic and technical delegates. Standing CIOs also provide a forum for periodically reassessing the legal regime, monitoring their implementation and compliance, and developing appropriate responses.

The CIO concept made a limited appearance in the 1958 Convention on the High Seas.⁸⁵ CIOs play a much larger role in the 1982 LOS Convention.⁸⁶ In all, the LOS Convention makes more than two dozen references to CIOs, sometimes using the singular form⁸⁷ and in other places the plural form,⁸⁸ but never including a definition of the phrase. Over the years, several organizations have sought to define the CIO phrase. The IMO paper on the implications of the Law of the Sea Convention for the IMO first issued in 1986 (and revised five times, most recently in 2007), provides a detailed discussion of the CIO role.⁸⁹ In 1991, the U.N. Division for Ocean Affairs and the Law of the Sea followed the IMO with a similar, but more comprehensive, paper.⁹⁰ The Law of the Sea Committee of the International Law Association's American Branch proposed a series of definitions for the relevant CIOs, which vary according to the article in which the phrase is used.⁹¹ For example, the committee proposed that, as used in article 22 (sea lanes and traffic separation schemes in the territorial sea), article 41 (same, for international straits), and article 60 (standards relating to abandoned structures in the Exclusive Economic Zone, or EEZ) of the LOS

85. Convention on the High Seas art. 25, Apr. 29, 1958, 13 U.S.T. 2312, 450 U.N.T.S. 82 (requiring States to take into account standards and regulations by CIOs in taking measures to prevent pollution of the sea by the dumping of radioactive wastes).

86. To see the interplay of CIOs in the 1982 LOS Convention, see generally any year's version of INTERNATIONAL ORGANIZATIONS AND THE LAW OF THE SEA: DOCUMENTARY YEARBOOK (Barbara Kwiatkowska et al. eds., various years). See also Tullio Treves, *The Role of Universal International Organizations in Implementing the 1982 UN Law of the Sea Convention*, in IMPLEMENTATION OF THE LAW OF THE SEA CONVENTION THROUGH INTERNATIONAL INSTITUTIONS 14 (Alfred H.A. Soons ed., 1990).

87. See, e.g., LOS Convention, *supra* note 6, arts. 41, 53, 211, 217–218, 223.

88. *Id.* arts. 197–202, 204–208, 210, 212–214, 216, 222, 242, 244, 266, 268, 275, 278.

89. See *Implications of the LOS Convention for the IMO*, *supra* note 16.

90. See Office of Legal Affairs, U.N. Div. for Ocean Affairs & the Law of the Sea, "Competent or Relevant International Organizations" Under the United Nations Convention on the Law of the Sea, 31 LAW OF THE SEA BULL. 79 (1996).

91. See, e.g., George K. Walker, *Defining Terms in the 1982 Law of the Sea Convention IV: The Last Round of Definitions Proposed by the International Law Association (American Branch) Law of the Sea Committee*, 36 CAL. W. INT'L L.J. 133 (2005) [hereinafter Walker, *Defining Terms*]; see also George K. Walker, *Professionals' Definitions and States' Interpretative Declarations (Understandings, Statements, or Declarations) for the 1982 Law of the Sea Convention*, 21 EMORY INT'L L. REV. 461 (2007).

Convention, the relevant CIO is the IMO or its successor.⁹² However, as used in article 53 (adoption of archipelagic sea lanes), the phrase means the IMO or its successor with respect to ships' navigation, and the International Civil Aviation Organization or its successor with respect to overflight.⁹³ For Part XII of the convention, which addresses protection of the marine environment, the relevant CIO is the IMO or its successor with respect to issues of: preventing, reducing and controlling vessel-source pollution; dumping at sea; safety of navigation and routing systems; and design, construction, equipment and manning of vessels, and the International Atomic Energy Agency or its successor with respect to issues involving radioactive substances.⁹⁴ Additional definition proposals may be found in Professor Walker's articles summarizing the ILA project.⁹⁵

It is now widely accepted that the IMO is the only competent international organization to approve sea lanes and traffic separation schemes.⁹⁶ Additionally, the IMO is understood to be the CIO for approving the standards for removal of artificial islands, installations, and structures under Article 60 of the LOS Convention.⁹⁷ The convention

92. LOS Convention, *supra* note 6, art. 41(4). Rule 10 of the COLREGS makes mandatory compliance with traffic separation schemes approved by "the Organization." Convention on the International Regulations for Preventing Collisions at Sea, R. 10, Oct. 20, 1972, 28 U.S.T. 3459, 1050 U.N.T.S. 16 [hereinafter COLREGS Convention].

93. LOS Convention, *supra* note 6, art. 53(9); see J. Peter A. Bernhardt, *The Right of Archipelagic Sea Lanes Passage: A Primer*, 35 VA. J. INT'L L. 719 (1995).

94. Walker, *Defining Terms*, *supra* note 91, at 167-68.

95. *Id.*; see also Louis B. Sohn, *Managing the Law of the Sea: Ambassador Pardo's Forgotten Second Idea*, 36 COLUM. J. TRANSNAT'L L. 285 (1997).

96. See also SOLAS, *supra* note 64, ch. V, reg. 8, para. 2; 2 UNCLOS COMMENTARY, *supra* note 80, at 212 (Myron H. Nordquist et al. eds., 1993); R.R. CHURCHILL & A. VAUGHAN LOWE, *THE LAW OF THE SEA* 267 (3d ed. 1999). Under its SOLAS chapter V authority, the IMO is also the approval authority for areas to be avoided, precautionary areas, recommended routes, two-way routes, and deep water routes, as well as mandatory reporting schemes. See also IMO, *Guidance Note on the Preparation of Proposals on Ships' Routing Systems and Ship Reporting Systems for Submission to the Sub-Committee on Safety of Navigation*, IMO Doc. MSC/Cir. 1060 (Jan. 6, 2003); IMO, *Recommendation on Weather Routing*, IMO Res. A.528(13) (Nov. 17, 1983). Ship routing and reporting measures have been employed to protect, *inter alia*, endangered whales and coral reefs. For a recent examination of the relationship between the respective roles of the IMO and the U.S. Coast Guard in designating a TSS, see *Defenders of Wildlife v. Gutierrez*, 532 F.3d 913 (D.C. Cir. 2008).

97. See 2 UNCLOS COMMENTARY, *supra* note 80, at 586 (Myron H. Nordquist et al. eds., 1993); IMO, *Guidelines and Standards for the Removal of Offshore Installations and Structures on the Continental Shelf and in the Exclusive Economic Zone*, IMO Res. A.672(16) (Oct. 19, 1989).

provisions for the CIO to establish procedures for releasing vessels on the posting of a bond or other financial security,⁹⁸ and to present evidence in LOS Convention Chapter XII enforcement proceedings,⁹⁹ are also understood to refer to the IMO. It is important to bear in mind, however, that in each case calling for IMO approval, as the CIO, such approvals are made by the IMO member States, acting through committee or the Assembly, not by the IMO Secretariat.¹⁰⁰

Currently, the IMO shares competency over some maritime transport and navigation matters with the International Labour Organization (ILO), World Customs Organization,¹⁰¹ International Atomic Energy Agency (IAEA),¹⁰² the U.N. Conference on Trade and Development (UNCTAD),¹⁰³ and the U.N. Commission on International Trade Law (UNCITRAL).¹⁰⁴ On issues other than marine transport (or ocean dumping), the relevant CIO under the LOS Convention might be the United Nations Environment Program (UNEP), UNESCO's Intergovernmental Oceanographic Commission (IOC), the World Health Organization (WHO), or the Food and Agriculture Organization (FAO).¹⁰⁵ Rough guidance for

98. LOS Convention, *supra* note 6, art. 220(7).

99. *Id.* art. 223. The conclusion follows from IMO's role under the MARPOL Convention. *See, e.g.*, MARPOL, *supra* note 78, arts. 2(7), 4(3), 6(4), 8(2), 11, 12(2).

100. For example, proposals for traffic separation schemes are initially reviewed by the Sub-committee on the Safety of Navigation (NAV), before approval by the States serving on the Maritime Safety Committee. Arguably, the IMO practice is more restrictive than that of International Civil Aviation Organization, which permits the Organization's thirty-six member Council to promulgate standards and recommended practices (SARPs), which in some cases bind member States without providing them with an opportunity to opt-out.

101. The World Customs Organization seeks to promote an honest, transparent and predictable customs environment. World Customs Org., Our Profile, http://www.wcoomd.org/home_about_us_our_profile.htm (last visited Feb. 13, 2009).

102. *See* Statute of the International Atomic Energy Agency, Oct. 26, 1956, 8 U.S.T. 1093, 276 U.N.T.S. 3.

103. UNCTAD developed the 1974 Convention on a Code of Conduct for Liner Conferences and the 1986 U.N. Convention on Conditions for Registration of Ships. Neither has gained a wide following. UNCTAD also worked with the IMO on the 1993 International Convention on Maritime Liens and Mortgages and the 1999 International Convention on the Arrest of Ships.

104. UNCITRAL developed the 1978 U.N. Convention on the Carriage of Goods by Sea (the "Hamburg Rules"). On July 3, 2008, it also completed work on the Draft Convention on Contracts for the International Carriage of Goods Wholly or Partly by Sea.

105. The current IMO High Level Action Plan also calls for ongoing partnerships with the International Civil Aviation Organization (ICAO), International Association of Marine Aids to Navigation and Lighthouse Authorities (IALA, or now IALA-AISM), International Hydrographic Office (IHO), International Telecommunication Union (ITU), International Electrotechnical Commission (IEC), International Association of Classification Societies (IACS), World Meteorological Organization (WMO), and the U.N. High Commissioner for Refugees (UNHCR). *See* IMO, High-Level Action Plan of the Organization and Priorities for the 2008–2009 Biennium, IMO Res. A.990(25), High-Level Action 1.1.2 (Dec. 21, 2007) [hereinafter IMO High-Level Action Plan (2008–2009)].

the respective competencies can be found in Annex VIII of the LOS Convention, which allocates responsibilities for listing subject matter arbitration experts among the IMO, IOC, FAO and UNEP.¹⁰⁶

As Dr. Rosalie Balkin, IMO's Director of Legal Affairs, observed in 2006, the IMO's remit has recently expanded beyond vessel safety and vessel-source pollution prevention subjects, to include vessel and port security issues.¹⁰⁷ She also notes that, as the IMO's mandate expands, some disagreements relating to organizational competency issues have arisen. For example, she describes protests by a few States parties to the 1988 Convention for the Suppression of Unlawful Acts against the Safety of Maritime Navigation (SUA) that are not party to the Nuclear Non-Proliferation Treaty (NPT),¹⁰⁸ over a proposal to include references to the NPT in the 2005 Protocol to the SUA Convention.¹⁰⁹ She explains:

These states have consistently expressed the view that the Legal Committee (and hence the [International Maritime] Organization) has exceeded the mandate derived from the IMO Assembly resolution 924(22) in even considering these matters and that the proper forum for such a debate is not within the IMO, but rather within the International Atomic Energy Agency (IAEA).¹¹⁰

As the IMO and other IOs expand their subject matter areas of concern conflicts over identification of the correct CIO may become more common.

106. In the marine pollution field, the IMO serves as the listing source for ship-source pollution and ocean dumping issues. Competency over other LOS Convention pollution issues is allocated to UNEP, which provides assistance in regional seas programs.

107. Rosalie Balkin, *The International Maritime Organization and Maritime Security*, 30 TUL. MAR. L.J. 1 (2006); see, e.g., Convention for the Suppression of Unlawful Acts Against the Safety of Maritime Navigation, Mar. 10, 1988, S. TREATY DOC. NO. 101-1, 1678 U.N.T.S. 201 [hereinafter SUA Convention].

108. Treaty on the Non-Proliferation of Nuclear Weapons, July 1, 1968, 21 U.S.T. 483, 729 U.N.T.S. 161.

109. IMO, International Conference on the Revision of the SUA Treaties, Oct. 10–14, 2005, *Adoption of the Final Act and Any Instruments, Recommendations and Resolutions from the Work of the Conference: Protocol of 2005 to the Convention for the Suppression of Unlawful Acts Against the Safety of Maritime Navigation*, IMO Doc. LEG/CONF.15/21 (Nov. 1, 2005) [hereinafter 2005 SUA Protocol]. The 2005 amendatory/supplementary protocol is not yet in effect. A parallel protocol would extend similar protections to offshore platforms. See also Georg Witschel, *Mare Liberum and Maritime Security: Contradiction or Complement?*, in LEGAL CHALLENGES IN MARITIME SECURITY 101 (Myron Nordquist et al. eds., 2008); Helmut Tuerk, *Combating Terrorism at Sea—The Suppression of Unlawful Acts Against the Safety of Maritime Navigation*, 15 U. MIAMI INT'L & COMP. L. REV. 337 (2008).

110. Balkin, *supra* note 107, at 27–28.

VI. THE IMO'S ROLE AS A SOURCE OF GENERALLY ACCEPTED
INTERNATIONAL RULES AND STANDARDS UNDER
THE LOS CONVENTION

The LOS Convention is the principal source of the Thames Formula, allocating as it does authorities and responsibilities among flag, coastal and port States and their supporting CIOs. More than twenty years ago, one author described the IMO's role as one involving "international legislation."¹¹¹ She then traced the Organization's historical development from a consultative body to one that was, by 1985, actively involved in developing the prescriptive regime for vessel safety and marine pollution prevention. The author also described the tacit acceptance process, which was then in its infancy. Nearly a decade later, Kenneth Simmonds provided an updated view the IMO, drawing extensively on the basic documents of the Organization.¹¹² Both authors describe a "global" and "general" international organization with unrivaled competency over the development of maritime standards of world-wide applicability.¹¹³ Some may question whether the IMO's "global" and "general" lawmaking reputation will be deserved, or its professed mission to achieve "universal and uniform application" of its conventions will be attained, if the IMO continues to bow to pressures to facilitate development of conventions which require as few as ten ratifications, and no minimum tonnage requirements to enter into force (as does the 2007 Nairobi Wreck Removal Convention).¹¹⁴

The 1958 Convention on the High Seas imposed a duty on flag States to conform to "generally accepted international standards."¹¹⁵ In the intervening half-century, the breadth and complexity of that body of international standards has grown in ways the original authors likely did not foresee. The current legal matrix of generally accepted international rules and standards (GAIS) developed by the member States of the IMO provides the uniformity important in the quintessentially globalized

111. CLEOPATRA ELMIRA HENRY, *THE CARRIAGE OF DANGEROUS GOODS BY SEA: THE ROLE OF THE INTERNATIONAL MARITIME ORGANIZATION IN INTERNATIONAL LEGISLATION* (1985).

112. KENNETH R. SIMMONDS, *THE INTERNATIONAL MARITIME ORGANIZATION* (1994); see also *THE INTERNATIONAL MARITIME ORGANISATION* (Samir Mankabady ed., 1984). The latter book omits any analysis of the IMO's role as a CIO or a source of the GAIS.

113. International and intergovernmental organizations are often classified and distinguished by their geographic reach (global versus regional) and subject matter competencies (general or specialized).

114. The IMO closely guards its primacy over global standards. For example, its current Strategic Plan calls for measures to "stave off regional or unilateral tendencies which conflict with the Organization's regulatory framework." See IMO Strategic Plan (2008–2013), *supra* note 8, Annex, para. 2.2.3.

115. Convention on the High Seas, *supra* note 85, art. 10.

maritime transport sector.¹¹⁶ Proof of “general acceptance” is persuasively established by the nearly universal ratification of the principal IMO-sponsored vessel safety and pollution prevention conventions.¹¹⁷ The IMO takes the position that even its resolutions constitute GAIS.¹¹⁸ Under the LOS Convention, the GAIS carry an importance that transcends the virtues of uniformity.¹¹⁹ As discussed more fully below, the GAIS in many ways “set the floor” for safety and environmental protection measures by flag States. In other applications, the GAIS set the ceiling on regulations by States other than the flag State. It will be shown, for example, that in some cases the enforcement jurisdiction of coastal States is restricted to the GAIS, precluding coastal States from enforcing their own non-GAIS standards.

The IMO prescriptive process is sometimes criticized as being too heavily influenced by shipping interests and too slow to react to emergent needs and issues.¹²⁰ Those criticisms were certainly deserved at one time—particularly in the period up through the late 1970s¹²¹—however, any assessment of the IMO’s ability to timely react to matters its members consider urgent should be reconsidered in light of the Organization’s response to several recent issues, including measures to reduce the incidence of human error (the STCW Convention and Code and the ISM Code), the phase-out of single-hull tankers following the

116. The IMO’s primacy has on occasion been challenged, leading to loss of uniformity. For example, following the T/V *Exxon Valdez* oil spill in 1989, the United States rejected the IMO-sponsored oil pollution liability regime, choosing instead to pursue a unilateral approach. More recently, following the *Erika* and *Prestige* incidents off the coast of Europe, member States of the European Union lost patience with the IMO-MARPOL timetable for phasing out single-hull tankers. See *infra* note 183. Most would agree that lack of uniformity in liability regimes is of less concern than in vessel construction, design, equipment and manning standards.

117. As of August 31, 2008, the IMO Convention has 168 Contracting States, representing 99% of the world’s tonnage; SOLAS has 158 parties, representing 99%; MARPOL (and Annexes I & II) has 147, representing 99%; Load Lines 1966 has 158, representing 99%; and STCW has 151, representing 99%. See IMO, Summary of Conventions as of Aug. 31, 2008, http://www.imo.org/conventions/mainframe.asp?topic_id=247.

118. *Implications of the LOS Convention for the IMO*, *supra* note 16, at 5 (resolutions adopted by the IMO Assembly, the MSC, and the MEPC “are normally adopted by consensus and accordingly reflect global agreement by all IMO Members”).

119. See Bernard H. Oxman, *The Duty to Respect Generally Accepted International Standards*, 24 N.Y.U. J. INT’L L. & POL. 109 (1991).

120. For a somewhat dated yet highly relevant and readable examination of the process, see R. MICHAEL M’GONIGLE & MARK W. ZACHER, *POLLUTION, POLITICS, AND INTERNATIONAL LAW: TANKERS AT SEA* (1979).

121. For a description of this period, see *id.* ch. IV.

loss of the tankers *Erika* and *Prestige*,¹²² and the post-September 11, 2001 security measures.¹²³ Those more recent actions demonstrate that the IMO is capable of responding quickly when its members are sufficiently motivated and united. In approaching an assessment of the IMO's responsiveness one must also be careful to distinguish questions regarding the adequacy of the international maritime prescriptive regime from those involving the effectiveness of the enforcement of that regime. Much of the criticism leveled at the IMO concerns compliance with existing rules, and under the existing *Thames Formula* responsibility for enforcement is largely assigned to individual flag States. Therein lies the principal reason the *Thames Formula* has failed to deliver fully on its promise.

VII. FLAG STATE ROLE IN MARITIME SAFETY, SECURITY, AND POLLUTION PREVENTION

The LOS Convention reaffirms the long established principle that primary responsibility for regulating vessel safety and pollution prevention lies with the vessel's flag State.¹²⁴ The convention acknowledges that it is for the flag State to "fix the conditions for the grant of its nationality . . . and for the right to fly [the granting State's] flag,"¹²⁵

122. See IMO, *Contribution of the International Maritime Organization (IMO) to the Secretary-General's Report on Oceans and the Law of the Sea*, at 25–27 (2004), http://www.un.org/Depts/los/general_assembly/contributions2004/IMO2004.pdf. In bowing to the pressure to accelerate the phase out of single-hull tankers, the IMO arguably repudiated its long-standing commitment not to apply such convention amendments to vessels built before the amendment's entry into force "unless there is a compelling need and the costs and benefits of the measures have been fully considered." See IMO, *Objectives of the Organization in the 1980s*, IMO Res. A.500(XII), para. 4 (Nov. 20, 1981); see also IMO Res. A.777(18), para. 4 (Nov. 4, 1993); IMO Res. A.900(21), para. 2.4 (Nov. 16, 1999); IMO Res. A.971(24), para. 6 (Nov. 30, 2005).

123. See *id.* ch. IV, for a description of this period.

124. LOS Convention, *supra* note 6, arts. 94, 217. See generally RESTATEMENT (THIRD) OF THE FOREIGN RELATIONS LAW OF THE UNITED STATES § 502 (1987); JOHN MANSELL, *FLAG STATE RESPONSIBILITY: HISTORICAL DEVELOPMENT AND CONTEMPORARY ISSUES* (forthcoming May 2009).

125. LOS Convention, *supra* note 6, art. 91(1). The United States has "firmly and successfully maintained that the regularity and validity of a registration can be questioned only by the registering state." *Nationality of Vessels*, 9 *Whiteman DIGEST* § 1, at 1 (quoting *Lauritzen v. Larsen*, 345 U.S. 571, 584 (1953)). Under U.S. law, a certificate of documentation is deemed "conclusive evidence of nationality for international purposes, but not in a proceeding conducted under the laws of the United States." 46 U.S.C.A. § 12134 (West 2007). Because Title 46 of the U.S. Code was enacted into positive law in 2006, its provisions are arguably "later-in-time" than some of the related treaty provisions in cases of conflict between the treaty and the statute. On the other hand, when the United States accedes to the 1982 LOS Convention, that convention will be later-in-time than the recently codified Title 46. See RESTATEMENT (THIRD) OF THE FOREIGN RELATIONS LAW OF THE UNITED STATES pt. V, introductory cmt. (1987); *id.* § 115 cmt. c.

suggesting that conditions for registration are governed by the granting State's municipal law, not international law.¹²⁶ Along with the right to grant national registry to ships¹²⁷ comes the attendant international duty to take adequate measures to ensure those vessels meet standards that are at least as strict as the generally accepted international standards designed to promote marine safety and prevent pollution.¹²⁸ The 1982 LOS Convention significantly expands the flag State's obligations over those imposed by the 1958 Convention on the High Seas.¹²⁹ Article 94 of the 1982 convention requires flag States to, *inter alia*, take measures to ensure safety at sea with regard to the construction, equipment, seaworthiness, and manning of ships; labor conditions and training of crews; the use of signals; and the prevention of collisions.¹³⁰ Though extensive, the flag State obligations listed in article 94 are understood to be nonexhaustive.¹³¹

Flag States must verify a vessel's compliance with relevant marine safety rules and standards both before granting the vessel registration and periodically thereafter.¹³² Verification is to be performed through inspections by qualified surveyors. Certificates attesting to compliance must be issued to the vessel. Flag States must also ensure that their vessels carry adequate charts, publications and navigational equipment, and that each vessel is in the charge of a competent master and officers

126. The IMO Secretariat, *Strengthening of Flag State Implementation*, paras. 11–12, delivered to the General Assembly, U.N. Doc. A/AC.259/11 (May 11, 2004). This issue is discussed further in the context of proposals to define an enforceable “genuine link” requirement, *infra*.

127. LOS Convention, *supra* note 6, art. 91; see also *Lauritzen v. Larsen*, 345 U.S. 571, 584 (1953).

128. LOS Convention, *supra* note 6, art. 94(5) (requiring flag States to adhere to GAIS on subjects enumerated in paragraphs 3 and 4 of article 94); see also *id.* art. 217 (“States shall ensure compliance by vessels flying their flag or of their registry with applicable international rules and standards, established through the competent international organization or general diplomatic conference, and with their laws and regulations adopted in accordance with this Convention for the prevention, reduction and control of pollution of the marine environment from vessels . . .”).

129. Compare Convention on the High Seas, *supra* note 85, arts. 5, 10, with LOS Convention, *supra* note 6, arts. 94, 194(3)(b), 217.

130. Safe manning levels are addressed in IMO, Principles of Safe Manning, IMO Res. A.890(21) (Nov. 25, 1999), amended by IMO, Amendments to Principles of Safe Manning, IMO Res. A.955(23) (Dec. 5, 2003).

131. See IMO Secretary-General, *supra* note 4, para. 19. A fuller compilation of flag State obligations can be found in Annex 2 of the Code for the Implementation of Mandatory IMO Instruments, discussed *infra* pp. 63–64.

132. LOS Convention, *supra* note 6, arts. 94(4)(a), 217(3).

who are fully conversant in applicable international regulations concerning the safety of life at sea, collision prevention, and pollution reduction, prevention, and control.¹³³

The generally accepted international standards which must be enforced under article 94 of the LOS Convention are those adopted under the auspices of the IMO and, to a lesser extent, the ILO and the IAEA. The IMO has sponsored some forty international conventions, protocols and other treaties, as well as hundreds of international codes, guidelines and recommendations. IMO Conventions which set accepted international standards include SOLAS, MARPOL, and STCW cited earlier, along with the Convention on International Regulations for Preventing Collisions at Sea (COLREGS)¹³⁴ and the Convention on Load Lines.¹³⁵ Other IMO (and IAEA) instruments address the transport of dangerous goods¹³⁶ and vessel-type risks.¹³⁷ By requiring compliance with generally accepted international standards, the LOS Convention in some sense effectively “universalizes” the principal IMO conventions for all States that are party to the LOS Convention, requiring all flag States to enforce the IMO conventions, whether a party to them or not.¹³⁸

133. *Id.* art. 94(4).

134. COLREGS Convention, *supra* note 92, arts. 1–9.

135. International Convention on Load Lines, Apr. 5, 1966, 18 U.S.T. 1857, 640 U.N.T.S. 133; *see also* International Convention on Tonnage Measurement of Ships, June 23, 1969, 34 U.S.T. 2363, 1291 U.N.T.S. 3. The list would also include the ILO’s International Convention Concerning Minimum Standards in Merchant Ships (ILO Convention 147). Convention (No. 147) Concerning Minimum Standards in Merchant Ships, Oct. 29, 1976, 15 I.L.M. 1288 [hereinafter ILO 147]. Article 2(a) of ILO 147 requires each State that ratifies the Convention to “have laws or regulations laying down, for ships registered in its territory . . . [s]afety standards, including standards of competency, hours of work and manning, so as to ensure the safety of life on board ship.” *Id.* art. 2(a). ILO 147 is one of the 68 ILO conventions and recommendations that will be superseded by the consolidated Maritime Labor Convention, Feb. 23, 2006 (MLC 2006), if it attracts sufficient ratifications to enter into force. *See generally* John Isaac Blanck Jr., *Reflections on the Negotiation of the Maritime Labor Convention 2006 at the International Labor Organization*, 31 TUL. MAR. L.J. 35 (2006); Roland Ives, *Seafarers’ Rights: Get Ready for MLC 2006*, SEAWAYS, Oct. 2008, at 6–7.

136. These include the IMO’s International Maritime Dangerous Goods (IMDG) Code and International Code for the Safe Carriage of Packaged Irradiated Nuclear Fuel, Plutonium and High-level Radioactive Wastes on Board Ships and the IAEA’s Regulations for the Safe Transport of Radioactive Material.

137. These include, for example, IMO codes for ships carrying liquefied gases in bulk (IGC Code), dangerous chemicals in bulk (IBC Code), grain in bulk (International Grain Code), solid bulk cargoes (BC Code), and high-speed craft (HSC Code).

138. *See* LOS Convention, *supra* note 6, art. 94(5). It is noteworthy, however, that in the IMO’s view this conclusion must be qualified; in particular it should not be construed as obviating the need for States to ratify the underlying IMO conventions. *See* Blanco-Bazán, *supra* note 18; *see also* Rüdiger Wolfrum, *IMO Interface with the Law of the Sea Convention*, in CURRENT MARITIME ISSUES AND THE INTERNATIONAL MARITIME ORGANIZATION, *supra* note 18, at 223, 232; RESTATEMENT (THIRD) OF THE FOREIGN RELATIONS LAW OF THE UNITED STATES § 502 cmt. c (1987).

By requiring universal adherence to the generally accepted international standards the LOS Convention seeks to thwart what might otherwise be a “race to the bottom”—at least a race in the prescriptive domain.

Under the LOS Convention vessels on the high seas are, for the most part, subject to the exclusive jurisdiction of their flag State.¹³⁹ As they approach and enter the coastal waters or ports of another State, however, they come increasingly within the jurisdiction or under the control of the coastal State or port State. The next two sections of the article examine the roles of those other State players in promoting marine safety, security and pollution prevention.

VIII. THE COASTAL STATE ROLE IN MARITIME SAFETY, SECURITY, AND POLLUTION PREVENTION

The legitimacy of the coastal State’s role with respect to foreign vessels under customary international law was characterized by Chief Justice John Marshall of the U.S. Supreme Court more than two centuries ago as one best measured by a standard of reasonableness.¹⁴⁰ With the later advent of coastal State “hovering acts” and the codification of the contiguous zone in the 1958 Geneva conventions on the law of the sea, the coastal State law enforcement role was expanded, yet remained balanced. A new and differentiated role for coastal States appeared after the 1967 *Torrey Canyon* grounding and oil spill off the coast of England, which prompted negotiations leading to the 1969 International Convention Relating to Intervention on the High Seas.¹⁴¹ Several years later, the COLREGS Convention provided recognition of the coastal States’ power to designate traffic separation schemes in their adjacent waters, to promote safety and prevent pollution.¹⁴²

139. LOS Convention, *supra* note 6, art. 92(1); *see also* S.S. *Lotus* (Fr. v. Turk.), 1927 P.C.I.J. (ser. A) No. 10, at 25 (Sept. 7).

140. *See Church v. Hubbard*, 6 U.S. (2 Cranch) 187, 235 (1804) (explaining that if coastal State assertions of control over foreign flag vessels were “such as unnecessarily to vex and harass foreign lawful commerce, foreign nations will resist their exercise. If they are . . . reasonable and necessary to secure their laws from violation, they will be submitted to.”). A comparison to the more cautious language by Sir William Scott (Lord Stowell) writing for the English High Court of Admiralty in the *Le Louis* decision is instructive. *Le Louis*, (1817) 165 Eng. Rep. 1464, 1480 (High Ct. of Adm.) (“[A] nation is not justified in assuming rights that do not belong to her merely because she means to apply them to a laudable purpose . . .”).

141. *See supra* note 56.

142. COLREGS Convention, *supra* note 92.

The 1982 LOS Convention significantly extended the coastal State's influence and control over its adjacent waters.¹⁴³ It provides for recognition of coastal State territorial seas up to twelve nautical miles in breadth,¹⁴⁴ and contiguous zones of up to twenty-four miles seaward of the baseline.¹⁴⁵ Within its territorial sea a coastal State has jurisdiction to prescribe regulations for the prevention, reduction and control of marine pollution from foreign vessels. However, the convention draws a distinction between a coastal State's regulation of foreign vessels transiting its territorial seas to enter the State's internal waters or ports and of those passing through in innocent passage.¹⁴⁶ For vessels in the former category, the coastal State has the right to take any necessary steps to prevent a breach of the conditions of port entry.¹⁴⁷ One prominent commentator reads that authority broadly, concluding that the LOS Convention contains "no restriction" on the right of a state to establish port entry requirements, "including those regarding the construction, manning, equipment, or design of ships."¹⁴⁸ The coastal State is more restricted in the regulations it may impose on foreign vessels in innocent passage in their territorial sea or transit passage through international straits.¹⁴⁹ In these two cases, such laws shall not

143. Coastal State obligations are also addressed in Annex 3 of the Code for the Implementation of Mandatory IMO Instruments, discussed *infra* pp. 63–64. See also Comm. on Coastal State Jurisdiction Relating to Marine Pollution, Int'l Law Ass'n, *Final Report*, in INT'L LAW ASS'N, REPORT OF THE SIXTY-NINTH CONFERENCE 443, 443–500 (2000); RESTATEMENT (THIRD) OF THE FOREIGN RELATIONS LAW OF THE UNITED STATES § 512 (1987); LINDY S. JOHNSON, COASTAL STATE REGULATION OF INTERNATIONAL SHIPPING (2004).

144. LOS Convention, *supra* note 6, art. 3. By Presidential Proclamation in 1988, the U.S. extended its territorial sea claim to twelve miles, but only for international law purposes. Proclamation 5928, 3 C.F.R. 547 (1989). For many domestic statutes, the territorial sea is still defined as extending only three miles.

145. LOS Convention, *supra* note 6, art. 33.

146. *Id.* art. 25. See generally RESTATEMENT (THIRD) OF THE FOREIGN RELATIONS LAW OF THE UNITED STATES §§ 512–513 (1987).

147. LOS Convention, *supra* note 6, art. 25(2); see e.g., 33 U.S.C. § 1228 (1994) (codifying U.S. authority for imposing conditions on entry); Notification of the Imposition of Conditions of Entry for Certain Vessels Arriving to the United States; Cambodia, 73 Fed. Reg. 63,499 (Oct. 24, 2008). Recently, considerable disagreement has arisen over the contours of the State's competency to impose "conditions on entry," as demonstrated by the international response to Australia's imposition of a pilotage requirement in the Torres Strait. See The Secretary-General, *Oceans and the Law of the Sea*, para. 190, delivered to the General Assembly, U.N. Doc. A/63/63 (Mar. 10, 2008) [hereinafter *Secretary-General Report 2008*]; see also Julian Roberts, *Compulsory Pilotage in International Straits: The Torres Strait PSSA Proposal*, 37 OCEAN DEV. & INT'L L. 93 (2006).

148. Bernard H. Oxman, *The Territorial Temptation: A Siren Song at Sea*, 100 AM. J. INT'L L. 830, 844 (2006). The author goes on to conclude that the United States exercises such control over the overwhelming majority of vessels operating off its coast. *Id.*

149. See LOS Convention, *supra* note 6, arts. 21, 42.

apply to the design, construction, manning or equipment of foreign ships unless they are giving effect to generally accepted international standards.¹⁵⁰ The convention also authorizes coastal States to establish sea lanes and traffic separation schemes in their territorial sea.¹⁵¹ Tankers and vessels carrying inherently dangerous or noxious substances can be required to confine their transit to such lanes. Coastal State jurisdiction over civil and criminal matters occurring on board foreign vessels passing through their territorial sea is circumscribed by the convention.¹⁵²

A coastal State's jurisdiction over vessels in transit through its exclusive economic zone is generally limited to enforcing generally accepted international rules and standards designed for the protection or preservation of the marine environment.¹⁵³ If a coastal State believes international standards are inadequate to protect a clearly defined area of particular ecological sensitivity within its EEZ, it may apply to the IMO for authorization to adopt special mandatory measures for prevention of vessel pollution within the area.¹⁵⁴ Those measures, if approved by the IMO, may exceed international standards. The criteria for designating what have come to be known as "particularly sensitive sea areas" (PSSAs) have undergone several revisions since the concept was first introduced.¹⁵⁵ When an area is approved as a PSSA, specific associated protective measures can be used to control the maritime activities in that

150. Such laws shall not hamper innocent passage or transit passage of foreign vessels. *Id.* arts. 24, 44.

151. *Id.* arts. 22, 41.

152. *Id.* arts. 27, 28 (criminal and civil jurisdictions, respectively). Although port States may exercise criminal and civil jurisdiction over non-public vessels voluntarily in their ports and internal waters, as a matter of international comity they traditionally refrained from doing so unless the offense disturbed the peace of the port. *See* *Cunard S.S. Co. v. Mellon*, 262 U.S. 100, 124 (1923); *see also* *Mali v. Keeper of the Common Jail (Wildenhus's Case)*, 120 U.S. 1, 12 (1887) (deciding case was grounded on bilateral consular treaty).

153. LOS Convention, *supra* note 6, art. 211(5).

154. *Id.* art. 211(6); *see also id.* art. 194(5). Agenda 21, adopted at the U.N. Conference on Environment and Development (UNCED) held in Rio de Janeiro in 1992, also supported enhanced standards to protect "particularly sensitive areas." Agenda 21: Program of Action for Sustainable Development, U.N. Doc. A/CONF.151/26 Vol. I, Annex II.

155. The current guidance is contained in IMO Resolution A.982(24), adopted by the Assembly in 2005. IMO, Revised Guidelines for the Identification and Designation of Particularly Sensitive Sea Areas, IMO Res. A.982(24) (Dec. 1, 2005) (revising original Guidelines from Annex 2 of IMO Res. A.927(22)). *See generally* Ryan P. Lessmann, *Current Protections on the Galápagos Islands are Inadequate: The International Maritime Organization Should Declare the Islands a Particularly Sensitive Sea Area*, 15 COLO. J. INT'L ENVTL. L. & POL'Y 117 (2004).

area, such as vessel routing and reporting requirements, strict application of discharge and equipment requirements for ships, and installation of vessel traffic services (VTS).¹⁵⁶ By 2008, eleven PSSAs had been approved by the IMO.¹⁵⁷ The MARPOL Convention also includes express provisions for designating certain waters as “special areas,” which may be subject to more stringent discharge requirements, including, where appropriate, a complete ban on discharges that would otherwise be permitted under the convention’s annexes.¹⁵⁸

As will be discussed more fully in the following section, the coastal State’s role is greatest with respect to ships entering or en route to its ports. In fact, the port State’s role respecting safety of foreign vessels is not entirely permissive. The LOS Convention imposes a duty to detain on port States that, upon request or on their own initiative, have ascertained that a foreign vessel within one of their ports is “in violation of applicable international rules and standards relating to seaworthiness of vessels and thereby threatens damage to the marine environment.”¹⁵⁹ Under such circumstances, the port State must take administrative measures to prevent the vessel from sailing.¹⁶⁰ Parties to the SOLAS Convention have a similar duty to intervene, to prevent a foreign vessel from sailing until unseaworthy conditions are corrected.¹⁶¹

The LOS Convention provides a number of safeguards for foreign flag vessels subject to enforcement measures by coastal States, to guard against abusive investigative practices, unreasonable detentions, and hearing procedures that are fundamentally unfair.¹⁶² Coastal States which violate the convention’s safeguards may be liable for any resulting damage or losses suffered by the vessel.¹⁶³ Claims against coastal States for failing to release promptly vessels and crews are subject to the convention’s provisions for compulsory dispute settlement

156. Authority for such measures to protect the marine environment is found in SOLAS ch. V, reg. 10. See INT’L MAR. ORG., SHIPS’ ROUTING (7th ed. 1999).

157. They include the Great Barrier Reef, Australia (1990, amended 2005); Sabana-Camagüey Archipelago in Cuba (1997); Malpelo Island, Colombia (2002); sea around the Florida Keys, United States (2002); Wadden Sea (2002); Paracas National Reserve, Peru (2003); Western European Waters (2004); Canary Islands, Spain (2005); Galapagos Archipelago (2005); the Baltic Sea area (2005); and the North-West Hawaiian Islands (2008).

158. The IMO Marine Environment Protection Committee is the approval body for “special area” designations. Approval is conditioned on the availability of adequate reception facilities for the wastes. See, e.g., MARPOL, *supra* note 78, Annex I, regs. 1(10) (definition of “special area”), 15.B, 34.

159. LOS Convention, *supra* note 6, art. 219.

160. The State may permit the vessel to proceed to the nearest repair yard, and upon removal of the causes of the violation shall permit the vessel to proceed. *Id.*

161. SOLAS, *supra* note 64, ch. I, reg. 19.

162. LOS Convention, *supra* note 6, arts. 223–231.

163. *Id.* art. 232.

if both the port State and flag State are parties to the convention.¹⁶⁴ At the same time, a coastal State may apply to such a dispute settlement tribunal for “provisional measures” to “prevent serious harm to the marine environment”; such measures might include further detention of the vessel.¹⁶⁵

IX. THE PORT STATE ROLE IN MARITIME SAFETY, SECURITY, AND POLLUTION PREVENTION

Under customary international law and the 1982 LOS Convention, a State’s jurisdiction over its internal waters is functionally equivalent to its jurisdiction over the State’s land territory.¹⁶⁶ Accordingly, States have relatively broad jurisdiction to prescribe and enforce regulations on foreign, nonpublic vessels within their internal waters and ports. Although there is authority for the proposition that customary international law requires that “the ports of every State must be open to foreign merchant vessels and can only be closed when the vital interests of the State so require,”¹⁶⁷ the weight of authority is to the contrary.¹⁶⁸ Nevertheless this important principle is implemented in a number of treaties of friendship, commerce and navigation or similar agreements.¹⁶⁹ The right of port access does not, however, carry with it immunity from port State

164. *Id.* art. 292.

165. *See id.* art. 290.

166. LOS Convention, *supra* note 6, art. 2(1).

167. *Saudi Arabia v. Arabian Am. Oil Co. (Aramco)*, 27 I.L.R. 117, 212 (Arb. Trib. 1958). *Contra* *Military and Paramilitary Activities in and Against Nicaragua (Nicar. v. U.S.)*, 1986 I.C.J. 14, 111–12 (June 27) (States enjoy sovereign right to control access to ports).

168. *See* Alan Boyle, *EU Unilateralism and the Law of the Sea*, 21 INT’L J. MARINE & COASTAL L. 15, 20–21 (2006); Ted L. McDorman, *Port State Enforcement: A Comment on Article 218 of the 1982 Law of the Sea Convention*, 28 J. MAR. L. & COM. 305 (1997).

169. Articles 1 and 2 of the Statute annexed to the Convention on the International Regime of Maritime Ports provide a reciprocal right of access among States-parties, but the Convention has not been widely ratified. *Convention on the International Régime of Maritime Ports*, Statute, arts. 1–2, Dec. 9, 1923, 58 L.N.T.S. 287. Article V of the General Agreement on Tariffs and Trade (GATT) similarly imposes an obligation on all States-parties to permit free transit of goods across their territory. *See* General Agreement on Tariffs and Trade, Oct. 30, 1947, 61 Stat. A-11, 55 U.N.T.S. 187; *see also* Marrakesh Agreement Establishing the World Trade Organization, Apr. 15, 1994, 33 I.L.M. 1144. Finally, article 2 of the FAL Convention provides no right of access, but does address the documentation requirements for vessel arrivals, stays, and departures. *See* FAL Convention, *supra* note 31, art. 2.

regulation.¹⁷⁰ At least eight IMO-sponsored conventions contain express provisions for port State enforcement.¹⁷¹ These conventions vary in the extent of control they grant to port States. Generally, each requires that valid certificates be accepted by port States as evidence of compliance with the convention unless there are grounds for believing the actual condition of the ship or equipment does not correspond substantially with the conditions reflected in the certificates.¹⁷² The SOLAS Convention requires that any inspections or surveys be carried out by officers of the flag State or its designated surveyor,¹⁷³ and confines port State remedial measures to non-punitive interventions or detentions. By contrast, the MARPOL Convention permits the port State not only to inspect foreign vessels but to also take enforcement action against foreign vessels found to be in violation.¹⁷⁴ Both conventions require port States to avoid unduly delaying a ship and call for compensation by the port State for any loss or damage suffered as a result of an undue delay or detention.¹⁷⁵

Neither customary international law nor the 1982 LOS Convention significantly restricts a port State's authority to inspect vessels voluntarily in its ports or internal waters.¹⁷⁶ The SOLAS Convention recognizes the authority of States to inspect foreign vessels in their ports to determine if they are in compliance with the applicable international rules and standards relating to seaworthiness of vessels.¹⁷⁷ In addition, States are

170. A particular treaty may limit the port State's jurisdiction over vessels of the other party. See, e.g., Consular Convention, U.S.-U.K., art. 22, June 6, 1951, 3 U.S.T. 3426.

171. These include the 1954 International Convention on Prevention of Pollution of the Sea by Oil, 1966 International Convention on Load Lines, 1969 International Convention on Tonnage Measurement of Ships, 1972 International Convention for Safe Containers, 1973 International Convention for Prevention of Pollution from Ships (and its 1978 Protocol), 1974 SOLAS Convention (and its 1978 Protocol), 1977 Torremolinos Convention for Safety of Fishing Vessels, 1978 STCW Convention, and the 1994 SOLAS Conference amendments to SOLAS ch. I, reg. 19.

172. See, e.g., SOLAS, *supra* note 64, ch. I, reg. 19; MARPOL, *supra* note 78, art. 5; International Convention on Load Lines, *supra* note 135, art. 21.

173. SOLAS, *supra* note 64, ch. I, reg. 6.

174. See, e.g., MARPOL, *supra* note 78, art. 5.

175. *Id.* art. 7; SOLAS, *supra* note 64, ch. I, reg. 19(f).

176. In the United States, the discussion is set out in *Schooner Exchange v. M'Faddon*, 11 U.S. (7 Cranch) 116 (1812) and *Cunard S.S. Co. v. Mellon*, 262 U.S. 100, 124 (1923). But see *Spector v. Norwegian Cruise Line Ltd.* 545 U.S. 119 (2005) (holding that Title III of the Americans with Disabilities Act applies to foreign flag cruise ships in United States ports).

177. See SOLAS, *supra* note 64, ch. I, reg. 19. The U.S. Coast Guard sponsored changes to Regulation I/19 following the T/V *Argo Merchant* oil spill and the spate of tanker casualties that followed in the late 1970s. At the same time, the Coast Guard sponsored the 1978 Tanker Safety and Pollution Prevention Protocol to the MARPOL 73 Convention. See M'GONIGLE & ZACHER, *supra* note 120, ch. IV. This demand for an expansion of port State authority was carried into the Third U.N. Conference on the Law of the Sea (UNCLOS III), which drafted the 1982 LOS Convention.

free under the LOS Convention to adopt more stringent standards for vessels calling on their ports, provided those standards are published and do not discriminate against foreign vessels (a more specific convention, like MARPOL or SOLAS, must also be considered).¹⁷⁸ As earlier discussed, if a vessel is not in compliance, and its unseaworthiness threatens damage to the marine environment, the port State has a duty to prevent the vessel from sailing until the condition is corrected.¹⁷⁹ These inspection, intervention, and detention aspects of port State control over foreign vessels have evolved significantly in the quarter century since the LOS Convention was finalized.¹⁸⁰

X. "LONDON, WE HAVE A PROBLEM"

Annual reports from the United Nations and IMO make it clear that the Thames Formula is under attack. For decades, the IMO has admirably served its role as the preeminent competent international organization under the 1982 LOS Convention and as the forum for international cooperation and development of the generally accepted international standards. But the IMO's prescriptive success does not excuse the Thames Formula's failure to achieve the desired level of implementation and compliance—a level subject to increasing upward pressure in an era characterized by a precautionary, risk averse approach.¹⁸¹ A recent comment by the IMO on the relationship between prescription and enforcement in the maritime security sector puts its finger on the Thames Formula's weakness:

Even though every new standard by the IMO is a step forward, it is virtually worthless without proper implementation [T]he mere existence of a new regulatory maritime security regime will provide no guarantee that acts of terrorism against shipping may be prevented and suppressed. It is the wide, effective and uniform implementation of the new measures that will ensure shipping does not become the soft underbelly of the international transport system.¹⁸²

178. See LOS Convention, *supra* note 6, art. 211(3).

179. *Id.* art. 219.

180. Port State obligations under the IMO instruments are addressed in Annex 4 of the Code for the Implementation of Mandatory IMO Instruments, discussed *infra* pp. 63–64.

181. Although a recent study comparing merchant vessel loss rates for the period 1979–2003 found that the rates had declined 76 percent over the period, those safety gains have failed to satisfy many states. Kevin X. Li & Haisha Zheng, *Enforcement of Law by the Port State Control (PSC)*, 35 MAR. POL'Y & MGMT. 61, 66 (2008) (reporting a reduction in vessel casualties resulting in total loss of the vessel from 6.85 percent of all merchant vessels in 1979 to 1.61 percent in 2003).

182. INT'L MAR. ORG., IMO 2004: FOCUS ON MARITIME SECURITY 7.

Although some might argue that the IMO's security initiatives are new, and that time is needed for their implementation, it is also widely recognized that a significant number of flag States are unable or unwilling to fully discharge their responsibilities under the LOS Convention or the IMO safety and pollution prevention conventions.¹⁸³ Some freely permit vessel control and accountability to be buried beneath Byzantine layers of corporate owners, operators, and charterers; delegate (some would say "outsource") their flag State role to commercial entities to which they provide little or no guidance or oversight; and fail to investigate casualties involving their vessels or take needed remedial action. Indeed, grossly inadequate enforcement practices by some flag States moved the late Lord Donaldson to warn us more than a decade ago that flag States are a "broken reed" which cannot be relied upon in the coming years.¹⁸⁴

Concerns with the Thames Formula's heavy reliance on a presumption of competent and committed flag States are not new. Following the 1967 grounding of the 120,000 ton tanker *Torrey Canyon* off the coast of Cornwall, the United Kingdom found its coastline and related interests gravely threatened by a foreign tanker on the high seas, where the vessel's flag State, Liberia, had exclusive jurisdiction over the vessel. More than thirty years ago, following a series of tanker incidents in the United States,¹⁸⁵ President Carter signaled the seriousness of his concerns with the formula—and his willingness to act alone if necessary—when he dispatched his secretary of transportation to London to deliver the U.S. demands to the IMO Council for a more effective international regime.¹⁸⁶

183. The enforcement deficit must be distinguished from disagreements over the adequacy of international prescriptions. For example, following the foundering of the T/V *Prestige* off the coast of Spain, members of the European Union challenged the LOS Convention's allocation of coastal State prescriptive jurisdiction, asserting at one point a right to expel single-hull tankers from waters of the EEZ, even though the vessels would be in compliance with the GAIS set by MARPOL. See Boyle, *supra* note 168, at 28–29; Veronica Frank, *Consequences of the Prestige Sinking for European and International Law*, 20 INT'L J. MARINE & COASTAL L. 1 (2005).

184. Hon. John Francis Donaldson, Baron of Lymington, Safer Ships. Cleaner Seas—A Reflection on Progress, Wakeford Memorial Lecture (Feb. 26, 1996), available at <http://homepages.tcp.co.uk/~glang/wakeford.html>; see also U.K. DEP'T OF TRANSP., SAFER SHIPS, CLEANER SEAS: REPORT OF LORD DONALDSON'S INQUIRY INTO THE PREVENTION OF POLLUTION FROM MERCHANT SHIPPING (1994). Lord Donaldson's report was the official inquiry into prevention of marine pollution by merchant vessels. The study on which it is based was initiated by the U.K. government following the T/V *Braer*'s grounding, break-up and the resulting massive oil spill in the Shetland Islands.

185. The merchant vessel casualty rate for the period 1973 to 2003 peaked 6.85 percent in 1979, shortly after the Carter mandate was delivered to the IMO Council. A decade later the casualty rate had been cut in half. Li & Zheng, *supra* note 181, at 66 fig.4.

186. M'GONIGLE & ZACHER, *supra* note 120, at 129–30.

The Organization for Economic Cooperation and Development (OECD), whose Maritime Transport Committee (MTC) reports for many years provided thoughtful analyses of the safety, environmental, and economic costs of lax flag State performance, repeatedly called attention to the flag State program.¹⁸⁷ In 2002, the World Summit on Sustainable Development Johannesburg Plan of Implementation, drawing on concerns for the marine environment expressed in the 1972 Stockholm and 1982 Rio Declarations, urged the IMO to consider stronger mechanisms to secure the implementation of IMO instruments by flag States.¹⁸⁸ The following year the U.N. Secretary-General's annual report on the law of the sea documented the nature and scale of the problem with flag State implementation and enforcement.¹⁸⁹ It began by noting that:

Today flag States are predominantly countries maintaining open registers with generally little maritime infrastructure. While some are keenly aware that operating a ship register entails responsibilities, a minority of flag States show little interest in these responsibilities and their performance record does credit neither to themselves nor to the shipowners who persist in using them. Their ships are substandard, that is, through their physical condition, their operation or the activities of their crew, they fail to meet basic standards of seaworthiness,

187. See, e.g., OECD Mar. Transp. Comm. [MTC], Policy Statement on Substandard Shipping by the Maritime Transport Committee of the OECD (Apr. 11, 2002), <http://www.oecd.org/dataoecd/18/37/2080990.pdf>; MTC, Action Plan to Combat Substandard Shipping (July 24, 2000), http://www.oecd.org/document/49/0,3343,en_2649_34367_2087025_1_1_1_1,00.html; MTC, *Maritime Security—Options to Improve Transparency in the Ownership and Control of Ships: Final Report* (June 2004), <http://www.oecd.org/dataoecd/62/39/32049167.pdf>; MTC, *Ownership and Control of Ships* (Mar. 2003), <http://www.oecd.org/dataoecd/53/9/17846120.pdf>; MTC, *Cost Savings Stemming from Non-Compliance with International Environmental Regulations in the Maritime Sector* (2003), <http://www.oecd.org/dataoecd/4/26/2496757.pdf>; MTC, *Regulatory Issues in International Maritime Transport* (Aug. 23, 2001), <http://www.oecd.org/dataoecd/0/63/2065436.pdf>; OECD, *Competitive Advantages Obtained by Some Shipowners as a Result of Non-Observance of Applicable International Rules and Standards* (1996), <http://www.oecd.org/dataoecd/10/10/2754615.pdf>. The MTC suspended its work in May of 2005. Its reports and documents are archived at OECD, Maritime Transport: Publications & Documents, http://www.oecd.org/findDocument/0,3354,en_2649_34367_1_1_1_1_1,00.html (last visited Apr. 9, 2009).

188. Plan of Implementation of the World Summit on Sustainable Development, para. 34(a), U.N. Doc. A/CONF.199/L.1 (June 26, 2002). At its Seventh Session, the U.N. Commission on Sustainable Development (CSD 7) requested that measures be adopted to ensure that flag States give full and complete effect to the IMO and other relevant conventions to which they are a party, with the goal that ships of all flags meet international rules and standards.

189. See The Secretary-General, *Oceans and the Law of the Sea*, paras. 85–91, delivered to the General Assembly, U.N. Doc. A/58/65 (Mar. 3, 2003) [hereinafter *Secretary-General Report 2003*].

violate international rules and standards, and pose a threat to life and/or the environment.¹⁹⁰

The report went on to warn that the “adoption and implementation of international rules and standards is rendered . . . meaningless . . . if they are not supported by effective enforcement,” and “it is the duty of flag States, not port States, to ensure that ships meet internationally agreed safety and pollution prevention standards.”¹⁹¹ However, as the U.S. Commission on Ocean Policy noted in its final report, many vessels continue to operate without serious scrutiny by their flag State, some of which “have little interest in the duties of a flag state, other than to collect registration fees.”¹⁹² Even responsible industry groups acknowledge the problem. For example, the Round Table of International Shipping Organizations, comprised of the Baltic and International Maritime Council (BIMCO), International Chamber of Shipping, International Shipping Federation, Intercargo and Intertanko, recognizes that “it is essential that standards of safety, environmental and social performance are maintained and enforced by flag states, in full compliance with international maritime regulations.”¹⁹³ Moreover, because the flag State is—after the vessel’s owner or operator—the first line of defense against potentially unsafe or environmentally damaging ship operations, a balance must be struck between the commercial advantages of selecting a particular flag and the need to discourage the use of flags that do not meet their international obligations.¹⁹⁴ The Round Table now tracks and

190. *Id.* para. 85 (footnotes omitted). The report drew in part upon prior work undertaken by the OECD Maritime Transport Committee.

191. *See Id.* paras. 88, 92. The report noted, however, that the role of port States was already being enlarged, as they were being “entrusted with inspecting fishing vessels to ensure that they are complying with conservation and management measures.” *Id.* para. 92.

192. U.S. COMM’N ON OCEAN POLICY, AN OCEAN BLUEPRINT FOR THE 21ST CENTURY 239 (2004), available at http://www.oceancommission.gov/documents/full_color_rpt/000_ocean_full_report.pdf. The commission went on to conclude that “[t]hese flag states become havens for owners of substandard vessels seeking to avoid meaningful oversight.” *Id.* The Commission’s report included two recommendations to address the dangers posed by lax flag States. First, it recommended that the United States work with other nations to accelerate efforts at the IMO to enhance flag State oversight and enforcement. *Id.* at 239, Recommendation 16-3. It also recommended that the Coast Guard, working with other nations, should establish a permanent mechanism to strengthen and harmonize port State control programs, under the auspices of the IMO. *Id.* at 240, Recommendation 16-4. Neither recommendation was particularly surprising, and both were at least partly already underway.

193. GUIDELINES ON FLAG STATE PERFORMANCE, *supra* note 25, at 4. The guidelines were first published in 2003.

194. *Id.* at 5–6.

reports on flag States that have, in the Round Table's assessment, "negative performance indicators."¹⁹⁵

XI. CAUSES OF THE FLAG STATE PROBLEM

Confronting and remedying the flag State problem under the present Thames Formula must begin with an understanding of the public and private interests that shape it. Under the present legal regime, owners of ships engaged in international (i.e., noncoastwise) trade have considerable discretion in selecting the State of registry for their vessels.¹⁹⁶ The problem is generally attributed to the ease of access to open registry or flag-of-convenience States; States which have little or no contact or connection with vessels flying their flag and appear to be engaged in a different kind of "race to the bottom"; one in which States in competition for vessel registrations offer owners anonymity and lax enforcement.¹⁹⁷

195. See FLAG STATE PERFORMANCE TABLE 2007, *supra* note 25. Performance indicator subjects include the flag State's infrastructure, ratification of maritime treaties, implementation and enforcement of those treaties, supervision of vessel surveys, implementation of the ISM and ISPS Codes and the STCW Convention and Code, employment standards, safe manning and seafarers' work hour standards, the conduct of casualty investigation, practices regarding vessel reflagging, repatriation of seafarers, participation in the IMO VIMSAS, participation in IMO and ILO meetings and consultations with shipowners. The Round Table also considers whether the flag State appears on a port State Control "white list" or "black list," the STCW "white list" and the age of the ships registered in the State. In the Flag State Performance Table, flag States with 12 or more "negative" performance indicators are singled out. *Id.*

196. Many States have cabotage laws that strictly limit the opportunities for foreign vessels to engage in the "coastwise" trade between two ports within the State. See, e.g., 46 U.S.C.A. § 55102 (West 2007).

197. While acknowledging there is no clear definition of "flag of convenience" (FOC) States, the annual UNCTAD review on maritime transportation nevertheless breaks out what it considers the principal FOC States in its various tables. See, e.g., UNCTAD, *supra* note 13, at 37–40 (identifying major open-registry fleets). Applying "performance" criteria to the various flag States, the 2007 Shipping Industry Round Table's Flag State Performance Table lists fourteen States that have twelve or more "negative performance indicators." See FLAG STATE PERFORMANCE TABLE 2007, *supra* note 25. An early attempt to limit the influence of FOC States within the IMO was abandoned more than forty years ago. The decision was made in the wake of *Constitution of the Maritime Safety Committee of the Inter-Governmental Maritime Consultative Organization*, Advisory Opinion, 1960 I.C.J. 150 (June 8), in which the ICJ rejected an interpretation of the MSC Constitution that would have allocated member State representation based on beneficial ownership and a genuine link between vessels and their putative flag State, rather than one that simply turned on the State of registry, without regard to beneficial ownership or the presence of a genuine link. See BOLESŁAW A. BOCZEK, *FLAGS OF CONVENIENCE: AN INTERNATIONAL LEGAL STUDY* ch. V (1962). The genuine link requirement added to the 1958 Convention on the High Seas was

Although it is true that the 1982 LOS Convention requires a vessel to have a “genuine link” with its State registry,¹⁹⁸ the requirement is largely ignored by some States, allowing owners to “vote with their rudders” and shift the vessel’s registry whenever the overall cost-benefit analysis favors an alternative choice of flag State. As discussed below, the U.N. General Assembly has urged States to require a genuine link with any vessels it registers and to work together to clarify the role of the genuine link requirement as it relates to the duty of States to exercise effective jurisdiction and control over vessels flying their flag.¹⁹⁹ At the same time, however, States derive a number of benefits from registering ships, including mobility, trade advantages, prestige and, of course, the revenue from registration fees and taxes. The conditions are therefore ripe for the registries of FOC States to swell, allowing them to dominate the global maritime scene.

The public and private perspectives that contribute to the current flag State problems can be brought into focus by considering two related hypothetical vessel flagging/reflagging decision-consequence chains. Assume that the new owner of a fifteen year-old bulk carrier engaged in the tramp (i.e., voyage charter) trade seeks, quite rationally, to minimize the construction, maintenance, and operating costs of the vessel. The “costs” of concern to an owner or operator generally include those of building, maintaining, and operating the vessel in compliance with the flag State’s standards. A five year forecast of those costs if the vessel is registered in State X is compared to the respective costs if it is instead registered in State Y or Z. Assume the analysis reveals an appreciable savings if it is registered in State Z, a FOC State. Other things being equal, a rational owner would reregister the vessel in Z and, most would agree, the owner would not be precluded from doing so by an internationally enforceable requirement that the vessel have a “genuine link” with State Z.

To appreciate the decision making calculus from the rational flag State’s point of view (and why a rational flag State is not likely to take

viewed by the International Law Commission as a *de lege ferenda* provision, rather than a codification of a then-existing rule of customary law. *Id.* at 291.

198. LOS Convention, *supra* note 6, art. 91. Article 5 of the 1958 Convention on the High Seas first established the genuine link requirement, but phrased it quite differently. It provided that “[t]here must exist a genuine link between the State and the ship; in particular, the State must effectively exercise its jurisdiction and control in administrative, technical and social matters over ships flying its flag.” Convention on the High Seas, *supra* note 85, art. 5. The 1982 convention separates the “genuine link” requirement in Article 91 from the “effective jurisdiction and control” requirement in Article 94 and includes a provision for recourse against the flag State only in the latter article. *See* LOS Convention, *supra* note 6, arts. 91, 94(1), (6).

199. G.A. Res. 62/177, paras. 46, 48, U.N. Doc. A/RES/62/177 (Dec. 18, 2007).

too strict a view of the genuine link requirement), assume that a vessel has been registered in State *Y* for the past ten years, after which the owner is told by surveyors acting on behalf of *Y* that in order to comply with the State's IMO-compliant construction and equipment standards, the vessel will be required to undergo substantial upgrades and repairs. In response to the news, the owner shops around and then informs State *Y* that it has determined that State *Z* will issue the necessary certificates without requiring such repairs. State *Y*, for whom vessel registration fees and taxes are an important source of revenue, understands that, so long as there are States like *Z* out there, by adhering to standards—or interpretations of standards—that are more stringent than those adopted by the *Z*'s of the world, States like *Y* will lose revenue. Just as important: State *Y* (and the IMO) understands that the world will not be rid of a vessel that is, in the minds of *Y*'s surveyors, substandard in its present condition if it attempts to enforce requirements stricter than *Z*'s. It will only succeed in driving the minimalist owner to flag-hop the vessel to State *Z*. In short, by attempting to force a cost conscious owner to bring its vessel up to its standards the flag State *Y*'s of the world will likely find their revenues shrinking.

To be sure, in an age of increasingly muscular Port State Control (PSC) regimes (discussed below), one of the “benefits” the vessel owner must consider in choosing the State of registry is the effect of that choice on the vessel's access to ports and the scrutiny it will be subjected to by vessel vetting agencies and when it files its advance notice of arrival for a call in a foreign port.²⁰⁰ Choosing a flag State that shows up on the so-called “black list” (or “target list”) of one or more regional or national PSC databases, owing to port State control data that reveal a higher than average level of noncompliance by ships registered under that flag, can impair the vessel's access to ports or its ability to avoid costly delays occasioned by enhanced PSC inspections and, perhaps, interventions or detentions. Such delays might trigger a penalty clause in the vessel charter, cutting into the owner's bottom line. Thus, the choice of flag State might reduce construction and operating costs, but it might also have the potential to affect a vessel's commercial value and profitability in today's highly competitive global shipping industry.

200. “Vetting” is essentially a “due diligence” process through which a prospective charterer (or buyer) of a vessel, or its agent, evaluates a prospective vessel to assess its past performance, safety records, performance results and regulatory compliance.

For reasons that are embedded in the Thames Formula, it seems clear that the coastal and port States of the world cannot solve the flag State enforcement problem alone. Although port State control remains an important bulwark against substandard shipping, the balance struck by the LOS Convention and the principal IMO safety and pollution prevention conventions does not give them sufficient leverage to compensate fully for the failure by flag States to exercise effective jurisdiction over their vessels while those vessels are in the port States' waters, let alone while the vessel is transiting its territorial sea or EEZ or the high seas. For vessels transiting waters of their EEZ or in innocent or transit passage in their territorial seas, coastal States are generally limited to enforcing generally accepted international standards,²⁰¹ and even where a particular vessel might not be in compliance with those standards, the coastal State is quite limited in the real-time enforcement measures it can take against a foreign vessel.²⁰²

XII. PORT STATE RESPONSES TO THE FLAG STATE PROBLEM

In 1982, when the LOS Convention was opened for signature, foreign vessel certificates of inspection or compliance were, if valid on their face, virtually conclusive evidence of a vessel's compliance with international standards. The LOS Convention provides that port States wishing to verify compliance with marine safety standards are initially limited by the LOS Convention to examining the vessel's certificates, records, and documents.²⁰³ Under this aspect of the Thames Formula, actual physical inspection of foreign vessels carrying valid certificates is authorized under the LOS Convention only when the port State has "clear grounds for believing that the condition of the vessel . . . does not correspond substantially with the particulars of those documents."²⁰⁴

Notwithstanding the deference accorded flag State certificates under the 1982 LOS Convention, many port States grew increasingly reluctant to accept those certificates without question, particularly certificates from FOC States, or States whose vessel or owner safety records or government-approved classification society statistics indicated serious

201. Consideration must also be given to the fact that many of the instruments developed within the IMO give an advantage to those flag States with the largest enrolled tonnage, overruling the one-State-one-vote principle and tipping the scales in favor of FOC States.

202. *See, e.g.*, LOS Convention, *supra* note 6, art. 220 (limits on coastal State enforcement of marine pollution laws).

203. *Id.* art. 226.

204. *Id.*; *see also id.* art. 94(6) ("A State which has clear grounds to believe that proper jurisdiction and control with respect to a ship have not been exercised may report the facts to the flag State.").

deficiencies in inspection practices.²⁰⁵ Indeed, a growing sense of unease arose among coastal and port States, many of which shared a belief that a significant number of “substandard,” if not decrepit, ships were blithely sailing the world’s waterways, exposing both crews and vulnerable coastal States to an unacceptable risk of maritime disaster.²⁰⁶ In short, the empirical evidence no longer justified the former “virtually conclusive” presumption of validity for flag State certificates. The reluctant answer to the shortfall in flag State responsibility for many was “Port State Control,” one of the most significant recalibrations of the original Thames Formula.

In 1994, the U.S. Coast Guard launched a Port State Control Initiative (PSCI) for the United States.²⁰⁷ Six years later it added the *Qualship 21* program, an incentive based initiative designed to motivate the shipping industry to eliminate substandard shipping.²⁰⁸ The PSCI built upon the Coast Guard’s foreign passenger vessel control verification program and its foreign tanker boarding program in place since 1977. Some 8,100 foreign vessels make more than 78,000 port calls in the United States each year.²⁰⁹ Recognizing that ninety-five percent of all passenger and cargo vessels and seventy-five percent of all tank ships calling on U.S. ports fly foreign flags, the Coast Guard resolved to devote increased attention to the condition of those vessels and their crews.

205. For one journalist’s description of the structure and operations of some well-known FOC State vessel registries see WILLIAM LANGEWIESCHE, *THE OUTLAW SEA: A WORLD OF FREEDOM, CHAOS, AND CRIME* ch. 1 (2004).

206. The term “substandard ship” is defined by the IMO as a ship whose “hull, machinery, equipment, or operational safety is substantially below the standards required by the relevant convention or whose crew is not in conformance with the safe manning document.” IMO, *Procedures for Port State Control*, Annex, para. 1.6.9, IMO Res. A.787(19) (Nov. 23, 1995), *amended by* IMO Res. A.882(21) (Nov. 25, 1999), *reprinted in* INT’L MAR. ORG. PROCEDURES FOR PORT STATE CONTROL: RESOLUTION A.787(19), AS AMENDED BY RESOLUTION A.882(21): 2000 EDITION, at 4 (2001).

207. *See* Implementation of the Port-State Control Initiative, 59 Fed. Reg. 36,826 (July 19, 1994); *see also* Frances Fazio, *Identifying and Eliminating Substandard Shipping: Port State Control Examinations*, PROC. MARINE SAFETY & SECURITY COUNCIL, Spring 2008, at 6, *available at* <http://www.uscg.mil/proceedings/> (follow “Archives” hyperlink on left column; then follow “2008 Vol 65, Number 1” hyperlink; then follow “Spring 2008.pdf” hyperlink).

208. Kevin McDonald, *Qualship 21: Improving the Quality of Shipping*, PROC. MARINE SAFETY & SECURITY COUNCIL, Spring 2008, at 14, *available at* <http://www.uscg.mil/proceedings/> (follow “Archives” hyperlink on left column; then follow “2008 Vol 65, Number 1” hyperlink; then follow “Spring 2008.pdf” hyperlink). Only about ten percent of the foreign vessels qualify for this program, the benefits of which include reduced inspection burdens.

209. Fazio, *supra* note 207, at 7.

The Coast Guard program is designed to identify substandard vessels and vessel operating companies and force them to either comply with vessel safety and pollution prevention standards or stay out of U.S. waters. Key features of the Coast Guard's PSCI include a risk oriented matrix for prioritizing vessels for boarding, based on the ship's management (owners, operators, and charterers), classification society, flag State, and the vessel type and its compliance history.²¹⁰ Additionally, in assessing security risks, the Coast Guard considers the vessel's most recent ports of call. During the first year of its PSCI the Coast Guard boarded over 16,000 foreign vessels—an increase of ninety-two percent over the prior year. Thirty percent of those vessels were found to be deficient, and two percent were detained.²¹¹ More recent data reveal significant improvement, but more than 100 ships are still detained by the Coast Guard each year for safety or security conditions.²¹²

A key feature of the new PSC approach is its regional integration of port State clusters. By 2006, PSC memoranda of understanding (MOU) had been negotiated to cover all of the world's principal sea areas, including Europe and the North Atlantic States (Paris MOU),²¹³ Asia and the Pacific (Tokyo MOU),²¹⁴ Latin America (Acuerdo de Viña del Mar),²¹⁵ the Caribbean Sea (Caribbean MOU),²¹⁶ West and Central

210. See U.S. Coast Guard, Port State Control Safety and Environmental Protection Compliance Targeting Matrix (2008), available at <http://www.uscg.mil/hq/g-m/pscweb/> (follow "Foreign Vessel Safety" hyperlink; then follow "PSC Safety Targeting Matrix" hyperlink; then follow "Safety Targeting Matrix" hyperlink). The Coast Guard's risk control regime distinguishes between safety criteria and security criteria. See U.S. Coast Guard, Port State Control, <http://www.uscg.mil/hq/g-m/pscweb/> (last visited Feb. 25, 2009).

211. Joel Glass, *Happy Anniversary for the US Safety Initiative*, LLOYD'S LIST, Apr. 28, 1995, at 5.

212. Fazio, *supra* note 207, at 8 (reporting 110 detentions in 2006). Other port State control organizations have experienced a recent rise in detentions. See, e.g., Op-Ed., *Look on the Bright Side*, LLOYD'S LIST, Aug. 24, 2007, at 8 (explaining reasons for possible increase in detentions by Paris MOU States); *Tokyo MOU Port State Detentions on the Increase*, LLOYD'S LIST, May 1, 2007, at 3.

213. Memorandum of Understanding on Port State Control in Implementing Agreements on Maritime Safety and Protection of the Marine Environment, Jan. 26, 1982, 21 I.L.M. 1. The original MOU was superseded and extended to all members of the European Union by the European Union Council Directive on Port State Control of June 19, 1995. See Council Directive 95/21/EC, 1995 O.J. (L 157) 1; Paris MOU, <http://www.parismou.org> (last visited Apr. 9, 2009) (website containing information about the Paris MOU, as well as an updated copy of the full text of the MOU).

214. The Memorandum of Understanding on Port State Control in the Asia-Pacific Region (Tokyo MOU) was signed December 1, 1993. For information about the Tokyo MOU, as well as the most recent amended version of the Tokyo MOU, see Memorandum of Understanding on Port State Control in the Asia-Pacific Region, <http://www.tokyo-mou.org> (last visited Apr. 9, 2009).

215. The Latin American Agreement on Port State Control of Vessels was signed in Viña del Mar, Chile, on November 5, 1992. For information about the agreement as well

Africa (Abuja MOU), the Black Sea region (Black Sea MOU),²¹⁷ the Mediterranean Sea (Mediterranean MOU), the Indian Ocean (Indian Ocean MOU),²¹⁸ and the Arab States of the Arabian Gulf (Riyadh MOU).²¹⁹ The States entering into the MOUs jointly seek to ensure foreign vessels calling at their ports meet international standards for safety and protection of the marine environment.²²⁰ Although few have gone so far as to advocate a wholesale transfer of vessel control responsibility from flag States to port States (and the IMO certainly does not espouse that view²²¹), the growing prominence of PSC programs is considered by many as the most significant—and effective—post-LOS Convention development in the vessel safety and pollution prevention regime.²²²

as the most recent amended version, see Acuerdo Latino—Viña del Mar 1992, <http://www.acuerdolatino.int.ar> (last visited Apr. 9, 2009).

216. Memorandum of Understanding on Port State Control in the Caribbean Region, Feb. 9, 1996, 36 I.L.M. 231; see Lee A. Kimball, *Introductory Note to Memorandum of Understanding on Port State Control in the Caribbean Region*, 36 I.L.M. 231 (1997); see generally Caribbean Memorandum of Understanding on Port State Control, <http://www.caribbeanmou.org> (last visited Apr. 9, 2009).

217. The Memorandum of Understanding on Port State Control in the Black Sea Region was signed April 7, 2000. For information about the Black Sea MOU as well as a recent amended version of the MOU, see Black Sea MoU on Port State Control, <http://www.bsmou.org/default2.htm> (last visited Apr. 9, 2009).

218. The Memorandum of Understanding on Port State Control in the Mediterranean was signed July 11, 1997. For information about the Mediterranean MOU and a recent copy of the MOU text, see Mediterranean MoU, <http://www.medmou.org> (last visited Apr. 9, 2009).

219. The Riyadh Memorandum of Understanding on Port State Control in the Gulf Region was signed June 30, 2004. For information about the Riyadh MOU and a recent copy of the MOU text, see Riyadh MoU on PSC, <http://www.riyadhmo.org> (last visited Apr. 9, 2009).

220. See generally Erik Jaap Molenaar, *Port State Jurisdiction: Towards Comprehensive, Mandatory and Global Coverage*, 38 OCEAN DEV. & INT'L L. 225 (2007); GEORGE C. KASOULIDES, PORT STATE CONTROL AND JURISDICTION ch. 6 (1993).

221. See *infra* note 266 and accompanying text (concluding that the primary enforcement burden must remain on flag States). The IMO supports the regional PSC arrangements through periodic workshops supported by the Technical Co-operation Fund. The MSC and MEPC have also issued a joint circular, setting out a Code of Good Practice for Port State Control Officers. See IMO, *Port State Control-Related Matters: Code of Good Practice for Port State Control Officers*, IMO Doc. MSC-MEPC.4/Circ.2 (Nov. 1, 2007).

222. One study based on merchant vessel casualty statistics concludes that the success in reducing those casualty rates between 1973 and 2003 can be “mainly attributed to” PSC enforcement; however, the authors’ methodology at best supports a conclusion of correlation, not causation. See Li & Zheng, *supra* note 181, at 67. Irrespective of the effectiveness of PSC as an enforcement and compliance tool, it is important to also consider how the costs of PSC are allocated and whether the present

Two later developments have expanded the reach of the PSC programs. The first was the broadened scope of PSC boardings. Parties to the Paris MOU were the first to agree to extend port State inspections to include operational requirements and an assessment of equipment and crew performance, by requiring the crew to conduct drills in the presence of PSC officials while in a foreign port. The impetus for extending port State inspections to include crew performance grew out of studies that identified human error as the cause of up to eighty percent of all marine casualties.²²³ The jurisdiction of port States to evaluate such “operational requirements” was formally codified in amendments to the SOLAS and MARPOL conventions in the mid-1990s.²²⁴ The second important development in the PSC program was the expanded emphasis on data collection, data sharing, and vessel identification and tracking. For more than a decade now, the results of port State inspections and other ship data have been captured in the MOU States parties’ databases, such as the Paris MOU States’ *Sirenac* database, enabling port State and flag State authorities to review records on a particular vessel, owner or operating company. Similarly, the Coast Guard has made portions of its Marine Information Safety and Law Enforcement (MISLE) system publicly available in the Port Safety Information Exchange (PSIX) database.²²⁵ Database quality assurance is facilitated by the European Quality Shipping Information (EQUASIS) Memorandum of Understanding, signed by the United States and six other nations.²²⁶ EQUASIS is a publicly accessible database containing reliable safety and quality records on some 77,000 merchant ships over 100 gross tons. Finally, international integration of vessel information

scheme permits and even encourages some States to externalize many of the costs associated with their role as flag State.

223. See generally IMO, *The Organization’s Strategy to Address the Human Element*, IMO Doc. MSC-MEPC.7/Circ.4 (May 22, 2006).

224. These provisions, sponsored by the IMO Flag State Implementation Subcommittee, entered into force in March 1996 through the tacit acceptance amendment procedure. See IMO, *Procedures for the Control of Operational Requirements Related to the Safety of Ships and Pollution Prevention*, IMO Res. A.742(18) (Nov. 4, 1993) (port State inspections to ensure crews are able to carry out essential shipboard marine pollution prevention procedures).

225. See U.S. Coast Guard, USCG CGMIX Port State Information Exchange Home Page, <http://cgmix.uscg.mil/psix/> (last visited Feb. 25, 2009).

226. See Jacques Bernard, *The Online Fight Against Substandard Shipping: Promoting Quality and Transparency in Shipping*, PROC. MARINE SAFETY & SECURITY COUNCIL, Spring 2008, at 24, available at <http://www.uscg.mil/proceedings/> (follow “Archives” hyperlink on left column; then follow “2008 Vol 65, Number 1” hyperlink; then follow “Spring 2008.pdf” hyperlink). The initial subscribers were the maritime administrations of the European Commission, France, Singapore, Spain, the United Kingdom, the U.S. Coast Guard, and Japan. Equasis, About Equasis, <http://www.equasis.org/EquasisWeb/public/About?fs=HomePage> (last visited Feb. 25, 2009).

will be enhanced once the IMO's International Ship Information Database (ISID) and Global Integrated Shipping Information System (GISIS) are fully operational.²²⁷

It is important to note that Port State Control is, at most, a partial solution to the flag State implementation and enforcement deficit. As mentioned earlier, the PSC program does not address the need for better enforcement on the high seas and does very little with respect to foreign ships located in the coastal States' adjacent waters. Indeed, coastal States often have no way of even determining the identity of vessels in their adjacent waters, to say nothing of being able to assess their condition or other risk factors. In an effort to strip vessels of their anonymity, the United Kingdom led efforts beginning in the 1990s to encourage the IMO member States to require all merchant vessels to carry transponders that would enable States to identify and track vessels when they enter the State's adjacent waters.²²⁸ The identities of approaching or transiting vessels could then be checked against the national, regional, or other PSC databases allowing the maritime authorities to identify and deny entry to vessels deemed to pose an unacceptable risk to the port State. The U.K. initiative led to SOLAS amendments requiring covered vessels to carry Automatic Identification Systems (AIS) beginning in 2000.²²⁹ A SOLAS security related amendment adopted by the IMO in 2006 established a similar requirement for certain vessels to carry Long-Range Identification and Tracking (LRIT) systems, which will provide coastal States with information on vessels navigating up to

227. See generally IMO, Global Integrated Shipping Information System, <http://gisis.imo.org/Public/> (last visited Feb. 25, 2009). The GISIS presently has 9 components: Maritime Security, Condition Assessment Scheme, Recognized Organizations, Maritime Casualties and Incidents, Port Reception Facilities, Pollution Prevention Equipment, Simulators, Greenhouse Gas Emissions, and Contact Points.

228. Lord Donaldson's "Safer Ships, Cleaner Seas" report recommended implementation of a transponder requirement, to put an end to the practice of unsafe ships operating "anonymously" in the State's coastal waters. See DONALDSON, *supra* note 184.

229. The requirement is implemented by SOLAS ch. V, reg. 19. The regulation requires AIS to be fitted aboard all ships of 300 or more gross tons engaged on international voyages, cargo ships of 500 gross tonnage and upwards not engaged on international voyages, and all passenger ships irrespective of size. The requirement became effective for all ships on Dec. 31, 2004. Ships fitted with AIS must maintain AIS in operation at all times except where international agreements, rules, or standards provide for the protection of navigational information. SOLAS, *supra* note 64, ch. V, reg. 19.

1,000 miles off their coast.²³⁰ These initiatives to enhance the coastal States' maritime domain awareness have become an integral component in risk identification, communication, assessment, and management schemes.

XIII. UNITED NATIONS RESPONSES TO THE FLAG STATE PROBLEM

Through the annual reports on ocean affairs and the law of the sea by the U.N. Secretary-General, the UNICPOLOS process, and the meetings of States Parties to the LOS Convention (SPLOS), the U.N. General Assembly stays informed on the nature of the flag State problem and steps to remedy it. Upon reviewing the U.N. Secretary-General's 2003 report and recommendations, the General Assembly delegates meeting later that year concluded that the onus must be kept on flag States to develop the necessary maritime administration and enforcement capability. The Assembly noted, with approval, recent initiatives at the IMO to improve flag State performance, but its resolution nevertheless urged:

flag States without an effective maritime administration and appropriate legal frameworks to establish or enhance the necessary infrastructure, legislative and enforcement capabilities to ensure effective compliance with, and implementation and enforcement of, their responsibilities under international law and, until such action is taken, to consider declining the granting of the right to fly their flag to new vessels, suspending their registry or not opening a registry.²³¹

The Assembly has reaffirmed its "shape up or get out of the flag State business" resolution each year since, and since 2005 has also called upon flag and port States to "take all measures consistent with international law necessary to prevent the operation of substandard vessels."²³² It has also facilitated efforts to examine the nature and causes of the problem and evaluate alternative remedial approaches. It chartered an ad hoc group of senior maritime IO representatives to study and clarify the "genuine link" requirement and a Consultative Group on Flag State Implementation comprised of representatives from six IOs.²³³ The

230. The new regulation (Ch. V, Reg. 19.1) requiring certain vessels to carry an LRIT is included in SOLAS chapter V on Safety of Navigation, through which LRIT will be introduced as a mandatory requirement for passenger ships (regardless of size), cargo ships of 300 or more gross tons, and mobile offshore drilling units. The regulation entered into force January 1, 2008 and will apply to ships on international voyages constructed on or after December 31, 2008, with a phased-in implementation schedule for ships constructed before that date. 33 C.F.R. §§ 169.200–245 (2008).

231. G.A. Res. 58/240, para. 27, U.N. Doc. A/RES/58/240 (Dec. 23, 2003).

232. G.A. Res. 59/24, para. 38, U.N. Doc. A/RES/59/24 (Nov. 17, 2004); G.A. Res. 60/30, para. 47, U.N. Doc. A/RES/60/30 (Nov. 29, 2005); G.A. Res. 61/222, para. 71, U.N. Doc. A/RES/61/222 (Dec. 20, 2006); G.A. Res. 62/215, para. 78, U.N. Doc. A/RES/62/215 (Dec. 22, 2007).

233. G.A. Res. 58/240, *supra* note 231, para. 28. A similar invitation was issued to the relevant IOs to study the issue as it applies to sustainable fisheries. G.A. Res. 58/14, para. 22, U.N. Doc. A/RES/58/14 (Nov. 24, 2003). In 2007, the General Assembly again

genuine link study group's fifty-page report consolidates the findings and recommendations of the IMO, ILO, FAO, UNEP, UNCTAD, and OECD.²³⁴ The Flag State Implementation Group's report, spanning some 143 pages, provides a detailed compilation of flag State obligations under the applicable maritime conventions.²³⁵ In its 2006 resolution on the law of the sea, the General Assembly took note of the high-level meeting to discuss the genuine link requirement convened by the IMO in 2005.²³⁶ It also reported that during the meeting the group considered the feasibility of suspending a noncomplying flag State's vessel registration, but ultimately concluded that the move could be counterproductive and might simply lead to reregistration in another non-complying flag State.²³⁷

At the end of its 2006 session, the General Assembly devoted twenty-four paragraphs of its annual LOS resolution to the subject of "maritime safety and security and flag State implementation."²³⁸ Nevertheless, two years later, the U.N. Secretary-General's annual report on oceans and the law of the sea again highlighted the fact that "lack of effective control by flag States, and the consequent undermining of the maritime safety regime, remains a paramount concern" of the United Nations.²³⁹ The report goes on to conclude that "[e]nhancing the role of coastal States and port States with respect to enforcement is important, particularly in

urged States to require a genuine link and to work together to clarify the role of the genuine link requirement related to the duty of States to exercise effective jurisdiction and control over vessels flying their flag. G.A. Res. 62/177, *supra* note 199, paras. 46, 48.

234. See IMO Secretary-General, *Report of the Ad Hoc Consultative Meeting of Senior Representatives of International Organizations on the "Genuine Link,"* U.N. Doc. A/61/160 Annex (July 17, 2006).

235. The Secretary-General, *supra* note 1. The document, which grew out of a May 2003 meeting of the involved IOs, includes individual reports from the IMO, FAO, ILO, UNEP, UNCTAD and the OECD. The report also provides a seventy-six page "inventory" of flag State obligations under the LOS Convention, its Implementation Agreement on Straddling and Highly Migratory Fish Stocks, and other international instruments.

236. G.A. Res. 61/222, *supra* note 232, para. 73. Attendees at the meeting sought to clarify the role of the genuine link in relation to the duty of flag States to exercise effective jurisdiction and control over vessels (including fishing vessels) flying their flag. See also IMO Secretary-General, *supra* note 234.

237. See IMO Secretary-General, *Letter Dated 23 June 2006 from the Secretary-General of the International Maritime Organization Addressed to the Secretary-General,* U.N. Doc. A/61/160 Annex (July 17, 2006). The IMO Council concurred.

238. G.A. Res. 61/222, *supra* note 232, paras. 50–73.

239. *Secretary-General Report 2008, supra* note 147, para. 212.

light of the failure of some flag States to exercise effective control” over their vessels.²⁴⁰ At the UNICPOLOS conference in June 2008, some States concerned over ineffective flag State implementation and enforcement emphasized the need to “review the current legal regime.”²⁴¹

XIV. IMO RESPONSES TO THE FLAG STATE PROBLEM

As the preeminent global international organization on matters of vessel safety, security, and pollution prevention, many consider the IMO to be the world’s best hope for solving the flag State problem. While not always agreeing on the severity and causes of the flag State problem or its remedies, the IMO member States have, in fact, grappled with it for decades.²⁴²

The IMO’s current strategic plan and high level action plan both set a goal of “eliminating” shipping that fails to meet and maintain IMO standards.²⁴³ Only concerted action by committed flag States will achieve that goal. Proposals to address the risks posed by flag States unable or unwilling to carry out their general obligation under Article 94 of the LOS Convention and the more specific obligations imposed by the IMO conventions generally fall into two groups. The first group of measures (which I term “flag State fortification” measures) seeks to preserve but shore up the present approach, which relies on flag State primacy, through a combination of stick and carrot measures. This group includes, for example, IMO capacity-building and technical assistance

240. *Id.* para. 216.

241. United Nations Open-ended Informal Consultative Process on Oceans and the Law of the Sea, June 23–27, 2008, *Report on the Work of the United Nations Open-ended Informal Consultative Process on Oceans and the Law of the Sea at its Ninth Meeting*, para. 76, U.N. Doc. A/63/174 (July 25, 2008). Some delegations voiced their belief that the proper forum for such discussions was the IMO, not the United Nations. *Id.*

242. Mention should also be made of the joint IMO-U.N. Food and Agriculture Organization (FAO) Working Group on Illegal, Unreported and Unregulated (IUU) Fishing and Related Matters, formed in 2000. The working group has explored a number of opportunities for cooperation and collaboration between the two IOs on initiatives to combat IUU fishing, including vessel tracking and detection systems, port State control and enforcement measures and possible synergistic applications of FAO’s Fisheries Integrated Global Information System (FIGIS) and IMO’s GISIS. While unsustainable fishing practices are the most obvious IUU fishing concern, the safety and environmental risks posed by IUU vessels are a central topic of discussion. This remains an area where the IMO has not enjoyed much prescriptive success. IMO representatives on the working group acknowledge, for example, the lack of broad member State support of fishing vessel issues within the IMO, as evidenced by the failure of its two principal fishing vessel safety conventions to attract sufficient ratifications to enter into force.

243. See IMO Strategic Plan (2008–2013), *supra* note 8, para. 3, Strategic Direction 5.3; IMO High Level Action Plan (2008–2009), *supra* note 105, High Level Action 5.3.1.

measures. The second group (which I term “flag State augmentation or displacement” measures) includes a variety of measures that supplement or even supplant flag State implementation and enforcement by expanding the role of non-flag States and the related IOs. This group includes, for example, measures to ramp up the role of port States and other States willing and able to take enforcement action in cases of flag State default.²⁴⁴ No bright lines demarcate the two approaches, and some of the measures in the first group arguably have the effect of eroding or at least muddying the flag State’s legal obligations, thereby necessitating measures drawn from the second group.

A. *The Sub-Committee on Flag State Implementation*

Much of the IMO’s response to the flag State problem has been institutional. The IMO Sub-Committee on Flag State Implementation (FSI) was established within the Maritime Safety Committee in 1992, partly in response to high-profile casualties involving the *Herald of Free Enterprise*, *Scandinavian Star*, *Doña Paz* and *Exxon Valdez*. The FSI provides a forum where both flag and port States can meet and attempt to find solutions to issues relating to implementation of the relevant international standards. FSI’s primary mission is the identification of measures necessary to ensure effective and consistent implementation of global instruments, including the consideration of difficulties faced by developing countries, primarily in their capacity as flag States, but also as port and coastal States. FSI has been instrumental in developing several measures (discussed below) to address the flag State problem.

B. *The IMO Code for the Implementation of Mandatory IMO Instruments*

The IMO recognizes that the ultimate effectiveness of its instruments depends on their wide, uniform and effective implementation. Toward that end, the FSI developed formal guidelines for flag State implementation, which the IMO Assembly adopted in 1997.²⁴⁵ In 2001, those guidelines

244. The IMO has also advocated the latter “enforcement State” approach in response to Somalia’s default as a coastal State home to a piracy-for-ransom epidemic. See IMO, Piracy and Armed Robbery Against Ships in Waters off the Coast of Somalia, IMO Res. A.1002(25) (Nov. 29, 2007).

245. See IMO, Guidelines to Assist Flag States in the Implementation of IMO Instruments, IMO Res. A.847(20) (Nov. 27, 1997).

were followed by a resolution establishing additional measures to strengthen flag State implementation.²⁴⁶ In 2003, the IMO decided to replace the guidelines with a more formal code. Building on an extensive 2004 report by the Consultative Group on Flag State Implementation,²⁴⁷ the FSI developed a draft Code for the Implementation of Mandatory IMO Instruments, which was adopted by an IMO Assembly resolution in 2005.²⁴⁸ The Code focuses on ten mandatory IMO instruments in its list of some 700 standards.²⁴⁹ The Code is organized into four parts that break down by respective roles of States: (1) common areas (subjects common to flag, port, and coastal States), (2) flag States, (3) coastal States, and (4) port States. They are followed by five annexes. The first four annexes cover the obligations of contracting parties and the fifth includes tables on instruments made mandatory under the IMO conventions. Although the Code addresses the obligations of States in their capacities as flag, port, and coastal States, the IMO Assembly resolution adopting the Code makes it clear that it is flag States that have the “primary responsibility” to have in place an adequate and effective system to exercise control over ships flying their flag and to ensure they comply with the applicable rules and standards for maritime safety, security, and protection of the marine environment.²⁵⁰ The Code, which the Assembly revised and approved in 2007,²⁵¹ now forms the basis for the Voluntary IMO Member State Audit Scheme discussed below, by identifying for member States and VIMSAS auditors the areas to be audited.²⁵² At present, compliance with the Code is voluntary,²⁵³ but it is envisaged that it will later be made mandatory.²⁵⁴

246. IMO, Measures to Further Strengthen Flag State implementation, IMO Res. A.914(22) (Nov. 29, 2001).

247. The Secretary-General, *supra* note 1.

248. IMO, Code for the Implementation of Mandatory IMO Instruments, IMO Res. A.973(24), Annex (Dec. 1, 2005).

249. *Id.* Annex, para. 6.

250. *Id.* pmbll., para. 5; IMO, Code for the Implementation of Mandatory IMO Instruments, 2007, IMO Res. A.996(25), pmbll., para. 6 (Nov. 29, 2007).

251. IMO, Code for the Implementation of Mandatory IMO Instruments, 2007, IMO Res. A.996(25) (Nov. 29, 2007).

252. ISO 9001 and 14001 standards inform the assessment process.

253. The voluntary nature of the Code must not be confused with the binding obligation for States parties to comply with any obligations established by the underlying international instruments addressed by the Code.

254. See Sub-Committee on Flag State Implementation (FSI), 11th Session: 7–11 April 2003, http://www.imo.org/Safety/mainframe.asp?topic_id=106&doc_id=2677 (last visited Feb. 25, 2009).

C. IMO Member State Capacity Building and Technical Assistance Measures

Although the international maritime prescriptions are developed within the IMO, it is the responsibility of State governments to implement and enforce the rules and standards. Enabling the “willing but unable” States is the goal of the IMO’s capacity-building and technical assistance efforts. The U.N. General Assembly has long acknowledged the need for capacity building measures to enable some States, particularly developing States, to implement and carry out their obligations under international legal instruments promoting maritime safety, security and protection of the marine environment.²⁵⁵ Similarly, at its 2007 session, the IMO Assembly observed that the failure to obtain universal and uniform implementation of IMO instruments is due in part to the lack of capacity by some States to carry out their obligations under new or amended instruments.²⁵⁶ The IMO Strategic Plan approved at that same session calls for enhanced member State capacity building to promote such universal and uniform application of IMO instruments.²⁵⁷ Achieving that goal will require an equitable and sustainable means of funding.

The important work carried out by the IMO Technical Co-operation Committee (TCC) and the IMO’s three maritime training and research institutions was described earlier.²⁵⁸ The Committee’s work has ripened into an ambitious Integrated Technical Co-operation Program (ITCP), which seeks to assist governments lacking the technical knowledge and resources needed to operate a shipping industry successfully.²⁵⁹ The ITCP’s rationale and mandate statement asserts:

255. See, e.g., G.A. Res. 62/215, *supra* note 232, para. 10 (listing among the capacities that must be “built up” economic, legal, navigational, scientific, and technical skills).

256. IMO, Need for Capacity-Building for the Development and Implementation of New, and Amendments to Existing, Instruments, IMO Res. A.998(25) (Nov. 29, 2007).

257. IMO Strategic Plan (2008–2013), *supra* note 8, para. 2.7; see also G.A. Res. 61/222, *supra* note 232, at 3.

258. See *supra* note 32.

259. See IMO Res. A.847(20), *supra* note 245; David Edwards, *Technical Assistance: A Tool for Uniform Implementation of Global Standards*, in CURRENT MARITIME ISSUES AND THE INTERNATIONAL MARITIME ORGANIZATION, *supra* note 18, at 391. The IMO cites its ITCP as part of the Organization’s contribution to achieving relevant Millennium Development Goals (MDG). See IMO, The Linkage Between the Integrated Technical Co-operation Programme and the Millennium Development Goals, IMO Res. A.1006(25) (Nov. 20, 2007).

many countries—especially the developing ones—cannot yet give full and complete effect to IMO’s instruments. Because of this, and as mandated by the Convention which created IMO, the Organization has established an Integrated Technical Co-operation Programme (ITCP), the sole purpose of which is to assist countries in building up their human and institutional capacities for uniform and effective compliance with the Organization’s regulatory framework.²⁶⁰

The ITCP thus embraces three priorities: advocacy of global maritime rules and standards, institutional capacity building, and human resource development.²⁶¹ The TCC plays the leading role in the program. Funding is obtained from a variety of sources, including the IMO Technical Co-operation Fund, multidonor trust funds, bilateral arrangements with providers, and one-time cash donations.

D. The Voluntary IMO Member State Audit Scheme

In its approach to enhancing maritime safety and security compliance by owners and operators the IMO has long recognized the value of self-assessments and third party audits. The confidence building measures, already incorporated into the ISM and ISPS Codes, are now being extended to the IMO member States themselves. In 1999, the IMO took its tentative first steps at promoting assessments of flag State performance when it launched a voluntary self-assessment scheme for flag States.²⁶² Two years later, however, the IMO Secretary-General reported that the response by IMO member States was disappointing.²⁶³ In fact, by 2004, only 54 of the 162 IMO member States had submitted their self-assessments to the IMO. In June 2002, in response to the Organization’s mixed experience with the self-assessment scheme, the IMO Council approved, in principle, a Voluntary IMO Member State Audit Scheme (VIMSAS) that would replace self-assessments with third-party audits.²⁶⁴

260. See IMO, Rationale and Mandate for IMO’s Technical Co-operation Programme, http://www.imo.org/TCD/mainframe.asp?topic_id=28 (last visited Feb. 25, 2009).

261. See IMO, IMO and Technical Co-operation in the 2000s, IMO Res. A.901(21), Annex (Nov. 25, 1999).

262. See IMO, Self-Assessment of Flag State Performance, IMO Res. A.881(21) (Nov. 25, 1999). In the maritime security field, self-assessment guidance and forms for SOLAS chapter XI-2 and the ISPS Code were also issued for SOLAS contracting parties and port facilities, IMO Doc. MSC.1/Circ.1192 (May 30, 2006), as well as for administrations and vessels, IMO Doc. MSC.1/Circ.1193 (May 30, 2006).

263. Sub-Committee on Flag State Implementation - 9th Session: 19–23 February 2001, http://www.imo.org/dynamic/mainframe.asp?topic_id=106&doc_id=453 (last visited Feb. 25, 2009). Later that same year, the Assembly updated and expanded its 1999 resolution. See IMO, Self-Assessment of Flag State Performance, IMO Res. A.912(22) (Nov. 29, 2001) [hereinafter Self-Assessment 2001].

264. Although the focus of this article is on flag State performance (and, to a lesser extent, port State performance), voluntary audit guidance documents have also been developed for coastal State roles. See, e.g., IALA Guideline No. 1054, Preparing for a

The following year, the IMO Assembly formally approved establishment of the VIMSAS and its further development.²⁶⁵ In endorsing the audit scheme adopted earlier by the Council, the IMO Assembly reaffirmed “that States have the primary responsibility to have in place an adequate and effective system to exercise control over ships entitled to fly their flag, and to ensure that they comply with relevant international rules and regulations.”²⁶⁶ It also made clear that the decision to launch a voluntary audit scheme was without prejudice to a later decision to make the scheme mandatory.²⁶⁷ Largely through the work of the FSI Sub-committee, the VIMSAS and the related Code for the Implementation of Mandatory IMO Instruments were further developed and expanded over the intervening years.²⁶⁸

Under the VIMSAS, auditors drawn from various IMO member States typically examine the audited State’s compliance with requirements relevant to its capacity as a flag, port and coastal State, drawing on the Code for the Implementation of Mandatory IMO Instruments. The process begins with a request to the IMO Secretary-General, completion of a pre-audit questionnaire and a memorandum of cooperation, which sets out the scope of the audit and the respective IMO and member State responsibilities. Denmark was the first State to volunteer for an audit. The United Kingdom, Spain, Chile and Japan soon followed. By June 2008, more than forty States, including the United States, had volunteered and twenty-one audits had been carried out.²⁶⁹ Several major open registry States, including Panama, Liberia, Cyprus, the Marshall

Voluntary IMO Audit on Aids to Navigation Service Delivery (Dec. 2006), available at http://www.ialathree.org/iala/pages/publications/documentspdf/doc_185_eng.pdf; IALA Guideline No. 1055, Preparing for a Voluntary IMO Audit on Vessel Traffic Services Delivery (Dec. 2006), available at http://www.ialathree.org/iala/pages/publications/documentspdf/doc_186_eng.pdf.

265. IMO, Voluntary IMO Member State Audit Scheme, IMO Res. A.946(23) (Nov. 27, 2003) [hereinafter Voluntary Audit Scheme].

266. *Id.* pmb1.

267. *Id.* para. 1.

268. See IMO, Framework and Procedures for the Voluntary IMO Member State Audit Scheme, IMO Res. A.974(24) (Dec. 1, 2005); IMO, Future Development of the Voluntary IMO Member State Audit Scheme, IMO Res. A.975(24) (Dec. 1, 2005) (calling for the addition of maritime security related matters).

269. Sub-Committee on Flag State Implementation, 16th Session: 2–6 June 2008, http://www.imo.org/Safety/mainframe.asp?topic_id=106&doc_id=8873 (last visited Feb. 25, 2009) [hereinafter FSI 16th Session]; see also *Closing the Net on Rustbuckets*, LLOYD’S SHIP MANAGER, Sept. 2006, at 10–11.

Islands, Vanuatu, and Belize joined the list of volunteers.²⁷⁰ Supporting international organizations quickly answered the call to develop guidance documents to assist IMO member States in preparing for audits.²⁷¹

Reactions to the audit scheme have been generally favorable. In 2003, the U.N. General Assembly noted with approval the IMO's decision to adopt the scheme²⁷² and what was then still a draft code for the implementation of mandatory IMO instruments.²⁷³ In the 2006 Coast Guard and Marine Transportation Act, Congress directed the Coast Guard to work with the responsible officials and agencies of other nations to accelerate efforts at the IMO to enhance oversight and enforcement of security, environmental, and other agreements, including an audit regime for evaluating flag State performance.²⁷⁴ Two years later, the U.N. General Assembly "welcomed" the progress made in the VIMSAS and "encouraged" all flag States to volunteer for the audits.²⁷⁵

XV. APPRAISAL OF CURRENT REMEDIAL EFFORTS AND PROPOSALS

The common strategic goal of the United Nations, IMO, ILO, and the vast majority of their member States is widespread and uniform implementation of, and compliance with, the international regime established to promote maritime safety, security, and environmental protection. In a perfect world, vessel owners, operators, masters, and crews would assiduously comply with all laws and regulations applicable to their vessels. But we do not live in such a world. As a result, compliance requires enforcement and control. The LOS Convention assigns the primary responsibility for exercising such jurisdiction and control to the vessel's flag State. It then prescribes the performance standards the flag State must meet: it must exercise that jurisdiction and control "effectively." Applying that standard raises a number of questions. For example, what

270. *Panama Register Faces Up to Warnings About Future*, LLOYD'S SHIP MANAGER, Sept. 2007, at 9–11.

271. See Felipe Silva, *Passing the Audit: Chile's Experience of the IMO Voluntary Scheme*, SEAWAYS, Aug. 2007, at 23–24.

272. *Secretary-General Report 2003*, *supra* note 189, para. 89; The Secretary-General, *Oceans and the Law of the Sea: Addendum*, para. 44, *delivered to the General Assembly*, U.N. Doc. A/58/65/Add.1 (Aug. 29, 2003) [hereinafter *Addendum to Secretary-General Report 2003*]. The report observed that a similar audit scheme had been adopted by the International Civil Aviation Organization and, two years later, was made regular, mandatory, systematic and harmonized. *Secretary-General Report 2003*, *supra* note 189, para. 89.

273. *Addendum to Secretary-General Report 2003*, *supra* note 272, para. 46.

274. Coast Guard and Maritime Transportation Act of 2006, Pub. L. No. 109-241, § 801, 120 Stat. 516, 562 (2006).

275. G.A. Res. 62/215, *supra* note 232, para. 79.

does it mean to exercise “effective” jurisdiction?²⁷⁶ How does the exercise of jurisdiction differ from “control?”²⁷⁷ When jurisdiction is concurrent, as when a ship enters the port or territorial sea of another State, is the relationship between the respective State jurisdictions primary and complementary? Under what circumstances may jurisdiction and control be delegated or waived?²⁷⁸ Is either jurisdiction or control subject to abrogation or derogation?²⁷⁹ Is the existence of a genuine link between the vessel and its flag State either necessary or sufficient to ensure effective jurisdiction or control? The IMO and its IGO, NGO, and member State partners have attempted to answer some of those questions through IMO codes, audit standards, and analyses of various LOS Convention provisions. Before turning to an assessment of those efforts, however, it is important to first consider what might be called the new flag State “paradigm” that now glosses the Thames Formula and whether the message to under-performing flag States is a consistent one.

The strategy of “fortifying” flag States is seen by some as naive and by many as ineffective.²⁸⁰ The core complaint is that the strategies have for decades approached the flag State problem with the belief that many

276. One might also ask in this regard whether the traditional approach to describing and analyzing jurisdiction under international law is relevant to assessing the bases for jurisdiction over vessels. For the traditional approach see *Harvard Research in International Law, Jurisdiction with Respect to Crime*, 29 AM. J. INT'L L. 435 (Supp. 1935).

277. The issue of “control” is also implicated in maritime security measures, which turn in part on the “ownership and control” of vessels. See IMO, *Maritime Security: Definition of Terms “Ownership” and “Control” of Ships*, IMO Doc. LEG 84/13/7 (Mar. 22, 2002) (prepared by Comité Mar. Int'l); IMO, *Maritime Security: Information on “Ownership” and “Control” of Ships*, IMO Doc. LEG 84/13/6 (Mar. 26, 2002) (prepared by the United States); IMO, *Note by the Secretariat: Maritime Security: Definition of the Terms “Ownership” and “Control” of Ships*, IMO Doc. LEG 84/13/1 (Feb. 28, 2002) (prepared by Intersessional Working Group on Mar. Sec.). In a very different context, U.N. Secretary-General Trygve Lie described an “effective control” standard for use in determining a government’s standing to represent the State in the United Nations. See Letter Dated 8 March 1950 from the Secretary-General to the President of the Security Council Transmitting a Memorandum on the Legal Aspects of the Problem of Representation in the United Nations, U.N. SCOR, 5th Sess., Supp. for Jan.–Mar. 1950, at 22–23, U.N. Doc. S/1466 (Mar. 9, 1950).

278. See generally Model Treaty on the Transfer of Proceedings in Criminal Matters, G.A. Res. 45/118, U.N. Doc. A/RES/45/118 (Dec. 14, 1990).

279. See, e.g., LOS Convention, *supra* note 6, art. 92(2).

280. Not considered here are some of the more coercive “fortification” measures, including those to enforce flag State obligations through litigation in the international or national courts (under State responsibility theories) or by assigning new enforcement powers to the IMO and ILO. Such measures might provide the general and specific deterrence needed to motivate otherwise reluctant flag States.

of the FOC States of the world are simply unable to meet their international obligations or, if able but unwilling, that stern admonitions by the IMO or the U.N. General Assembly would bring them around. What has been missing from the debate so far, however, is an acknowledgement that the IMO's myriad accomplishments as a quasi-legislative body demonstrate that the Organization has largely supplanted the flag State as the primary source of prescriptive maritime law, thereby diminishing the flag State's significance and stature and providing a convenient excuse for flag States to take a more passive role. The breadth and detail of the IMO vessel safety, security, and environmental protection conventions, codes, and resolutions—now updated and expanded through tacit acceptance amendment procedures—have effectively reduced the flag State's role to one of implementing rules established in London. Erosion of the flag States' role does not stop there.

At the same time prescriptive responsibilities increasingly gravitate to the IMO committees, a growing number of flag States have elected to rely on classification societies to carry out the State's role as the "Administration" under the IMO vessel safety and pollution prevention conventions, thus eroding the flag State's enforcement role. Where the flag State establishes appropriate controls over such classification societies, acting as its "recognized organization," as called for by the IMO, there may be little or no loss of effective control over the vessels.²⁸¹ In some cases, however, the flag State fails to provide adequate instruction to the classification society or to implement a program of verification and monitoring.²⁸²

Many of the same flag States that outsource safety and pollution prevention compliance inspections to classification societies are also unable to effectively police their vessels as they navigate beyond the flag State's waters. Just as aggressive flag State enforcement might induce some vessel owners to adopt a more passive and reactive posture to managing their vessels, the knowledge that diligent port States will be scrutinizing their vessels might well make it easier for some flag States to relax their efforts. At the same time, some flag States have entered into agreements with other able and willing "enforcement" States to

281. See IMO, Guidelines for the Authorization of Organizations Acting on Behalf of the Administration, IMO Res. A.739(18) (Nov. 4, 1993). Flag States are to report to the IMO those "Recognized Organizations" the flag State has determined meet the resolution's guidelines, together with the supporting data.

282. Deficiencies in flag State supervision of the implementation and monitoring of ISM Code compliance to ensure safety management systems are effective and verifying that mariners serving on their vessels comply with applicable STCW training and certification standards are of particular concern.

carry out their obligation as flag States under the LOS Convention to suppress narcotics trafficking by their vessels.²⁸³ Similar agreements to facilitate nonflag State boardings are called for by protocols to the U.N. Convention on Transnational Organize Crime protocols,²⁸⁴ the Proliferation Security Initiative,²⁸⁵ the 2005 SUA Convention Protocol,²⁸⁶ Straddling Fish Stocks Agreement,²⁸⁷ and the emerging and more general regime for enforcing fishing conservation and management measures on the high seas.²⁸⁸

When the devolution of prescriptive responsibility from flag States to the IMO is coupled with similar erosion of the flag State's enforcement responsibility, the effect may nullify efforts to "shore up" flag State competency and diligence. Indeed, as the loss of primacy over prescriptive responsibility is combined with the large-scale transfer of inspection, survey, and enforcement responsibilities to classification societies, port States and that group of States willing and able to provide a law

283. Article 108 of the LOS Convention imposes on all States a duty to cooperate "to the fullest extent possible" in the suppression of drug trafficking, "in conformity with the international law of the sea." The "LOS conformity" proviso preserves the flag State's primacy in jurisdiction and control over its vessels while on the high seas. LOS Convention, *supra* note 6, art. 108. Article 17 of the 1988 Convention Against Illicit Traffic in Narcotic Drugs provides a framework for flag States to grant their consent to boardings by able and willing States. United Nations Convention Against Illicit Traffic in Narcotic Drugs and Psychotropic Substances art. 17, Dec. 19, 1988, S. TREATY DOC. No. 101-4, 1582 U.N.T.S. 95.

284. *See, e.g.*, Protocol Against the Smuggling of Migrants by Land, Sea and Air, Supplementing the United Nations Convention Against Transnational Organized Crime arts. 7-9, *opened for signature* Dec. 14, 2000, U.N. Doc. A/55/383 Annex III, *reprinted in* 40 I.L.M. 335 (2001).

285. As of early 2009, nine States have entered into bilateral agreements with the United States permitting PSI-related boardings. *See* U.S. Dep't of State, Ship Boarding Agreements, <http://www.state.gov/t/isn/c27733.htm> (last visited Feb. 26, 2009).

286. *See* 2005 SUA Protocol, *supra* note 109, art. 8(2) (article 8*bis* in the original SUA Convention).

287. *See* Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 Relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks arts. 18-21, Aug. 4, 1995, S. TREATY DOC. NO. 104-24, 2167 U.N.T.S. 88 [hereinafter Straddling Fish Stocks Agreement].

288. Most would agree that the international standards for flag State cooperation in fisheries matters are comparatively weak. *See, e.g.*, Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas arts. III, V(3), Nov. 24, 1993, S. TREATY DOC. NO. 103-24, 2221 U.N.T.S. 91, *available at* <http://www.fao.org/legal/TREATIES/012t-e.htm>.

enforcement presence on the high seas,²⁸⁹ the picture that emerges is one of “brass plate” flag States, which, like brass plate ship owners and operators, have little or no real contact with their vessels, or at the very least, lack the level of contact that enables them to exercise effective jurisdiction and control required by the LOS Convention.²⁹⁰ To admonish such flag States for failing to perform up to their responsibilities while progressively eroding their effective prescriptive and enforcement role is at best inconsistent.

XVI. THE WAY AHEAD: MINIMIZING THE FLAG STATE PROBLEM AND THE RISKS IT POSES

Decades of efforts to fortify flag States, while salutary and almost certainly necessary, have so far failed to provide an adequate level of compliance, particularly in the global commons. The solution to the problem does not lie in further study of the “genuine link,” a new ocean enclosure movement,²⁹¹ protracted, expensive, and oftentimes inconclusive inter-State litigation employing State responsibility theories²⁹² or in rewriting the IMO charter to require it to actively police and discipline flag States.²⁹³ At present, the most promising approach appears to be to expand efforts to minimize both the number of underperforming flag States and the scale of such underperformance, while also taking

289. See ROSEMARY GAIL RAYFUSE, *NON-FLAG STATE ENFORCEMENT IN HIGH SEAS FISHERIES* (2004) (asserting the existence of an emerging exception, in customary international law, to the rule of primacy of flag State jurisdiction in the high seas fisheries context).

290. Jurisdiction and control problems are present not only with respect to the States’ role as a flag State but also as the State of nationality of the vessel’s beneficial owner, particularly in the field of fisheries compliance and enforcement. See G.A. Res. 62/215, *supra* note 232, para. 78 (urging all States to exercise effective jurisdiction and control over their nationals, including beneficial owners, in order to deter illegal, unreported, and unregulated fisheries activities).

291. See Oxman, *supra* note 148, at 832. Professor Ed Miles identifies the goals of “territorialist group” in his analysis of the UNCLOS III negotiating process. See EDWARD L. MILES, *GLOBAL OCEAN POLITICS* 546 (1998) (book index pointing to “territorialist group,” with many referenced pages discussing their goals). One argument in favor of expanding the coastal States’ role is that only those States are in a position to achieve the level of integrated coastal and ocean management (ICM) called for by the Rio Declaration.

292. Inter-State litigation serves an important role in settling disputes among States, but its value as a quality control measure for flag State performance is doubtful. Moreover, flag States would almost certainly argue that the sole remedy for allegations of ineffective jurisdiction and control is in article 94(6) of the LOS Convention, though an international tribunal is more likely to see that provision as, at most, an exhaustion prerequisite for admissibility.

293. The IMO’s prominence and success create the danger posed by all large and mature organizations: creativity, efficiency, and initiative give way to the goal of promoting the institution’s prestige and protecting or enlarging its turf.

additional steps to reduce the risks posed by underperforming flag States. One possibility worth further examination is an approach that leverages flag State fortification measures with a more balanced application of the existing principles of flag State primacy and the emerging role of port State and enforcement State complementarity,²⁹⁴ coupled with a more robust assessment and reporting role for the IMO.²⁹⁵

In assessing the effectiveness of the currently implemented or proposed initiatives, it is important not to lose sight of the fact that implementation and compliance are the paramount goals and that enforcement, whether by flag States or others, is not an end in itself but rather a response to inadequate compliance by vessel owners and operators.²⁹⁶ If all vessel owners and operators complied with the applicable regime without prodding, enforcement would be unnecessary. At the same time, it seems clear that lax flag States attract and provide cover for lax vessel operators. Accordingly, measures to improve flag State performance have the potential to instill a compliance culture among vessel operators. It also bears repeating that merely supplementing or supplanting flag State control with port State control does little or nothing, by itself, to address the enforcement deficit while those vessels are on the high seas or in the coastal States' offshore waters.

294. Where two or more organizations share a relationship of complementarity, like the relationship between the International Criminal Court (ICC) and the member State criminal courts, one organization is primary and one is secondary. It is important in such schemes to have a clearly defined "trigger" for shifting responsibility from the organization with the primary role and the one with the secondary role. Under the Rome Statute for the ICC, the "trigger" turns on whether the member State is willing and able to carry out its investigation and prosecution obligations. Rome Statute of the International Criminal Court art. 17, July 17, 1998, 2187 U.N.T.S. 90.

295. Subsidiarity is the organizing principle which holds that action at the closest (lowest, least-centralized) competent level is best. Centralized authority should have only a secondary role. *See, e.g.*, Consolidated Version of the Treaty Establishing the European Community art. 5, Dec. 24, 2002, 2002 O.J. (C 325) 33, available at http://eur-lex.europa.eu/en/treaties/dat/12002E/pdf/12002E_EN.pdf.

296. This paper focuses on the level of implementation and compliance rather than the adequacy of the prescriptions. Most would agree that problems with prescriptions are generally easier to solve than those concerning implementation and compliance.

A. The Voluntary IMO Member State Audit Scheme and Implementation Code

Over the past half-century the quest to define and enforce a genuine link requirement with teeth has consumed far more time and energy than its limited promise would warrant. In the search for measures to ensure uniform and effective compliance with IMO instruments, the genuine link requirement must, for the most part, now be seen as a mere distraction.²⁹⁷ It was not by oversight or inadvertence that the UNCLOS III conferees separated the genuine link requirement from the requirement for the flag State to exercise effective jurisdiction and control, and to relegate the registration question to the flag State's municipal law.²⁹⁸ In a paper on strengthening flag State implementation the IMO secretariat submitted to the UNICPOLOS co-chairs in 2004, the IMO pointed out that its statistics demonstrated "cases of non-compliance are not related to the ship register features [which is a genuine link issue] but to the effectiveness of the supervisory role (or lack thereof) exerted by the maritime administrations concerned [which is a jurisdiction and control issue]."²⁹⁹ The paper's authors then appeared to reject calls to further define the genuine link requirement for ship registration, arguing

297. See MYRES S. MCDUGAL & WILLIAM T. BURKE, *THE PUBLIC ORDER OF THE OCEANS* 35, 86–87, 1011–12 (New Haven Press 1987) (1962). Equally dubious is the practice of conflating a State's status as a "flag of convenience" or "open registry" with its performance as a flag State. A responsible open registry State might well exercise jurisdiction and control more effectively than one of its less "open" counterparts.

298. Compare Convention on the High Seas, *supra* note 85, art. 5(1) ("There must exist a genuine link between the State and the ship; in particular, the State must effectively exercise its jurisdiction and control . . ."), with LOS Convention, *supra* note 6, art. 91(1). Such was the established rule under the prior customary law. *Id.*; see also *Muscat Dhows (Fr. v. Gr. Brit.)*, Hague Ct. Rep. (Scott) 93 (Perm. Ct. Arb. 1905); NIGEL P. READY, *SHIP REGISTRATION* (1991). *But see* *Nottebohm Case (Liech. v. Guat.)*, 1955 I.C.J. 4 (Apr. 6) (distinguishing the question of a State's competency to determine conditions for granting citizenship, which is governed by municipal law, from the obligation of other States to recognize a claim of citizenship, which is governed by international law); Philip Jessup, *The United Nations Conference on the Law of the Sea*, 59 COLUM. L. REV. 234, 256 (1959) (concluding, in the context of the 1958 Geneva conventions on the law of the sea, that the principle established in *Nottebohm* could be applied to questions regarding nationality of vessels). The *Restatement* concludes that although "the lack of a genuine link does not justify another state in refusing to recognize the flag or in interfering with the ship," a State may reject diplomatic protection by the flag State when there is no genuine link. RESTATEMENT (THIRD) OF THE FOREIGN RELATIONS LAW OF THE UNITED STATES § 501 cmt. b (1987). The International Tribunal for the Law of the Sea adopted a broader view of the scope of the flag State's diplomatic protection role. See *M/V Saiga (No. 2)* (St. Vincent v. Guinea), 120 I.L.R. 143, 185 (Int'l Trib. L. of the Sea 1999).

299. IMO, *Strengthening of Flag State Implementation*, para. 13, U.N. Doc. A/AC.259/11 (May 11, 2004) [hereinafter *Strengthening Implementation*]; see also IMO Secretary-General, *supra* note 4, paras. 10–11.

that “[t]he elaboration of new international rules cannot be conceived as a means of counteracting the lack of proper implementation of existing ones.”³⁰⁰

The fate of the 1986 Convention on Registration of Ships,³⁰¹ developed under the auspices of UNCTAD, demonstrates the futility of prescribing new and, for the most part, duplicative genuine link prescriptions. More than twenty years after that convention was opened for signature, only fourteen States have ratified or acceded to it, far short of the forty required for the convention to enter into force. That might be one reason why the European Commission, in its 2006 Green Paper, while expressing interest in further study of the genuine link requirement, called upon the member States to explore ways of “making exceptions to the principle of the exclusive jurisdiction of the flag state over its vessels, or to alleviate or supplement this principle.”³⁰²

In sharp contrast to the poor prospects for a robust genuine link approach to solving the enforcement deficit, the IMO’s third party State audit initiative holds great promise for improving performance by all flag States. As a stimulus to flag State performance and international confidence building measures, the IMO’s VIMSAS is plainly an improvement over the predecessor self-assessment scheme,³⁰³ particularly with the addition of the Code for the Implementation of Mandatory IMO Instruments. The factors used to conduct the audits should go a long

300. *Strengthening Implementation*, *supra* note 299, para. 14(a). The IMO added that “[q]uestions relating to ownership of vessels should be considered as subject matters of an economic corporate nature that clearly fall beyond the purview of the law of the sea and the mandate of international organizations as defined in the Convention on the Law of the Sea” and that, in the IMO’s view, “what is important for the purposes of establishing a ‘genuine link’ is to identify who assumes the responsibility for the operation and control of the vessel.” *Id.* para. 14(b). Thus, the ISM and ISPS Codes focus their compliance obligations on the vessel’s operator, which might well be an entity other than the owner.

301. United Nations Convention on Conditions for Registration of Ships, Feb. 7, 1986, 26 I.L.M. 1229 (not in force).

302. *Commission Green Paper, Towards a Future Maritime Policy for the Union: A European Vision for the Oceans and Seas*, at 46 (2006), available at http://ec.europa.eu/maritimeaffairs/pdf/greenpaper_brochure_en.pdf; see also Comm’n of the European Communities, *An Integrated Maritime Policy for the European Union*, COM (2007) 575 final (Oct. 10, 2007), available at <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2007:0575:FIN:EN:PDF>.

303. See, e.g., Self-Assessment 2001, *supra* note 263; IMO, *Guidance on Voluntary Self-Assessment by SOLAS Contracting Governments and by Port Facilities*, IMO Doc. MSC.1/Circ.1192 (May 30, 2006).

way toward defining “effective” jurisdiction and control³⁰⁴—at least in the context of the ten IMO Conventions covered by the Code.³⁰⁵ Theoretically, a flag State should not be able to “pass” an audit until it can demonstrate that it has the ability to exercise effective jurisdiction and control over the vessels it registers. Similarly, a properly designed and conducted audit should determine whether the flag State has in fact established and maintains the kind of relationship with its vessels sought by advocates of a more robust genuine link requirement.

But, to produce the compliance gains necessary to restore confidence in the international maritime regime, the VIMSAS must be more than a box-checking, form filing exercise, like so many ISM Code safety management systems. As we learned when port States began looking behind vessel certificates to the vessel’s actual condition and the crew’s ability to perform certain operations, forms do not tell the whole story. For the VIMSAS to achieve its goal of identifying and remedying noncomplying flag States the scheme will need to incorporate, at the minimum, appropriate flag State performance measures, a competent and impartial assessment force, and pre-established consequences that will flow when the audit discloses unsatisfactory performance. In addition, it must be applied evenhandedly to all flag States at regular intervals.

To be a valid compliance scheme, the VIMSAS must fully integrate vessel casualty and PSC intervention and detention data,³⁰⁶ any LOS Convention article 94 complaints against the flag State alleging a failure to exercise proper jurisdiction and control over its vessels,³⁰⁷ as well as MARPOL article 6 violation reports.³⁰⁸ It must also closely scrutinize

304. The VIMSAS auditing criteria would also be relevant in any assessment of whether a flag State had breached its international obligations and should therefore bear international responsibility to those injured by such a breach.

305. The criteria for assessing the exercise of “effective” jurisdiction and control with respect to conservation and management of living marine resources or biological diversity would differ in many respects from those used to assess maritime safety, security, and protection of the environment. The Joint IMO/FAO Ad Hoc Working Group on Illegal, Unreported, Unregulated (IUU) Fishing and Related Matters recognizes, however, that the IMO’s experience with VIMSAS may be helpful in developing flag State assessment criteria for fisheries.

306. At its June 2008 session, the FSI agreed on terms of reference for a study to determine whether there is a correlation between PSC data (particularly detentions) and casualty statistics. FSI 16th Session, *supra* note 269.

307. LOS Convention, *supra* note 6, art. 94(6) provides that:

A State which has clear grounds to believe that proper jurisdiction and control with respect to a ship have not been exercised may report the facts to the flag State. Upon receiving such a report, the flag State shall investigate the matter and, if appropriate, take any action necessary to remedy the situation.

308. FSI examines member State annual MARPOL reports; however, less than 25 percent of the States comply with their obligation to file these mandatory reports and those reports that are available for FSI examination and analysis are generally up to two years old.

the flag State's oversight of ISM and ISPS Code implementation on its vessels. The flag State's practices on reflagging-in and reflagging-out, particularly on vessels fifteen or more years old, should also be assessed and explanations should be required for any apparent tolerance of flag-hopping. Moreover, reliable remedies must be added to the scheme for those instances in which the flag State's control measures are found to be ineffective, particularly where they require intervention by a port State or by some other "enforcement" State acting on default of the flag State.

At this point, it is not at all clear that the presently voluntary audit scheme will achieve its targeted participation rate, that the flag States of concern will volunteer to be audited at regular intervals, or that deficiencies detected during audits will be promptly corrected.³⁰⁹ Continued pressure by influential international and nongovernmental organizations, such as the Round Table of International Shipping Associations, will provide an additional incentive for flag States to volunteer for audits. Nonetheless, the irony that the IMO member States adopted a requirement for mandatory third party audits of vessel and port facility safety (under the ISM Code) and security (under the ISPS Code) provisions, while so far failing to impose a similar compliance enhancing and confidence building mandate on flag and port States is clear, and the need for compulsory audits has not been lost on industry (or maritime NGOs).³¹⁰ The IMO Assembly understands this, and has made it clear that the decision to launch a voluntary audit scheme was made without prejudice to later making the scheme mandatory.³¹¹

Like ISO 9000 and 14000 standards, the IMO audit scheme has the potential to foster a commitment by flag States to pursue a strategy of continuous improvement in their implementation and oversight operations, and to transmit that safety commitment to the operators of their

309. Cf. L.D. Barchue, *Making a Case for the Voluntary IMO Member State Audit Scheme* (paper presented by IMO staff member at the World Maritime University, Oct. 17–19, 2005), available at http://www.imo.org/includes/blastDataOnly.asp/data_id%3D17981/Voluntary.pdf. The 2008 U.N. Secretary-General Report indicated that 18 audits had been completed and 16 other member States had formally indicated their readiness to be audited. *Secretary-General Report 2008*, *supra* note 147, para. 194.

310. No claim is made that third party audits have achieved "effective" compliance with the ISM or ISPS Code. Indeed, anecdotal evidence suggests both regimes are performing well below expectations.

311. Voluntary Audit Scheme, *supra* note 265, para. 1.

vessels.³¹² But the audits must be backed up with strong incentives for participation in good faith or made mandatory. Volunteering for an audit could, for example, be made a prerequisite for IMO technical assistance or capacity building funds. And for those States having undergone audits, a negative performance rating might be cause for assigning that State a probationary status and requiring measurable progress toward benchmarks to remedy any discrepancies found by the auditors as a further condition for such assistance or funds. Admittedly, this moves the IMO ever closer to an enforcement role—a role the Organization might be reluctant and perhaps not equipped to take on.³¹³

B. Primacy and Complementarity: What to do When Flag State Control is Not “Effective” and the Need for Action is Urgent?

Even with additional capacity building and auditing measures, the nominal linchpin of the Thames Formula will remain flag State primacy. And it is increasingly apparent that no combination of flag State fortification measures, by themselves, is likely to bring the performance of all flag States up to the levels demanded by the growing number of risk averse States. To instill the needed level of confidence in the international regime for marine safety, security, and environmental protection, enforcement of international standards might have to move beyond the “slim reed” of flag State primacy. To borrow a phrase: hope is not a strategy.

Perhaps the time has come to alter the present architecture of the Thames Formula by incorporating a new complementarity rule, together with a more robust subsidiary role for the IMO. Under such an approach, flag State jurisdiction would still be primary, but other States would assume a more pronounced complementary role vis-à-vis those flag States whose performance falls below the standards established and

312. The U.S. Coast Guard’s 2009–2014 Marine Safety Performance Plan will significantly increase inspector and investigator capacity, establish centers of excellence, improve the program’s information technology capacity, increase its rulemaking capacity, and implement a quality management system using the balanced scorecard approach. Significantly, the marine safety program, which has long been subject to performance reviews by, among others, the Government Accountability Office, will retain an independent outside contractor to evaluate the program. See U.S. COAST GUARD, MARINE SAFETY PERFORMANCE PLAN FY 2009–2014 (2008), available at <http://www.uscg.mil/hq/cg5/cg54/docs/MSPPerformancePlan.pdf>.

313. Institutional competency and success in one role (development of a prescriptive regime) does not always transfer readily to another role. There is also the danger posed by the oftentimes inverse relationship between an institution’s size and its adaptability and resistance to the dangers of putting concerns for the institution’s image over concern for its effectiveness.

assessed by the IMO. The IMO would continue to serve its subsidiary role as the centralized forum for developing the international maritime regime and facilitating its implementation. In addition, the Organization would develop the criteria and assessment protocols for evaluating the effectiveness of flag States jurisdiction and control with respect to the international instruments within the IMO's competency. Under the expanded subsidiary role, the IMO flag State assessment data and reports would be published for use by other member States in exercising their complementary jurisdiction authority.

Where a flag State has demonstrated a chronic inability or unwillingness to effectively exercise jurisdiction or control over its vessels, while at the same time declining to take advantage of the VIMSAS program to remedy its deficiencies, other States would be justified putting such flag States on notice, as article 94 of the LOS Convention envisions, forwarding their findings to the IMO and its member States, denying vessels flying the flag of the deficient State entry into their ports or waters and refusing to recognize the validity of attempts by vessel owners to reflag-out of the sanctioned State to avoid those sanctions. Consideration might also be given to modifying the existing legal regime to permit nonflag States to take enforcement action as a "surrogate of necessity" for the flag State, when deemed necessary for safety, security or protection of the environment, subject to an obligation to compensate the vessel for any loss or damage suffered as a result of unwarranted enforcement actions.³¹⁴

The new approach might begin with promulgation of a White List of flag States that assesses and report the States' performance using, among other things, the VIMSAS criteria. The list would also include the flag State's vessel casualty data, PSC intervention data, complaints to the IMO by port or coastal States that the flag State was not complying with its obligations under Article 94 of the LOS Convention, and any data available from prior self-assessments or third party audits. Any flag State whose vessel casualty or PSC data exceeds an established threshold, or that had been the subject of an article 94 complaint, would

314. The LOS Convention articles on piracy, the right of approach, and hot pursuit incorporate similar requirements. See LOS Convention, *supra* note 6, arts. 106, 110, 111. Incorporation of a duty to compensate in the later-drafted Straddling Fish Stocks Agreement, *supra* note 287, art. 21, and the 2005 SUA Protocol, *supra* note 109, art. 8(2), have led some to conclude that a duty to compensate has ripened into a rule of customary law.

be asked to immediately submit to a VIMSAS audit. If it failed to do so, and to authorize the IMO to publish the results, the flag State would be ineligible for inclusion in the White List of Flag States. As a result, some or all of the consequences described above would follow, including complementary enforcement. Additionally, States that fail to meet the standards required for inclusion on the White List might be subject to a rebuttable presumption of international responsibility for any harm caused by one of its vessel's noncompliance with an applicable international rule or standard.

The virtues of an expanded complementarity approach are several. First, it would create a new mechanism for enforcing article 94 of the LOS Convention by attaching consequences to article 94(6) reports. Second, by tying the request for a VIMSAS audit of the flag State to that State's casualty and intervention/detention data the approach is more likely to be accepted as legitimate by the flag State. Third, it would help ensure that the limited resources available for flag State audits are directed to those States whose safety records indicate the greatest need for third party assessment. The approach would also go a long way toward restoring confidence in a maritime safety and pollution prevention regime that relies to heavily on flag State competence and diligence. Finally, by incorporating an expanded complementary enforcement option, this approach could provide a safeguard of last resort against flag State failures that seriously threaten maritime safety or the marine environment. If the approach proves successful, it could later be expanded to address maritime labor and marine resource conservation and management instruments.

XVII. CONCLUSION

As the world strives to develop and implement a global maritime regime that is optimal in its prescriptions and level of compliance, the IMO will play an increasingly important role. The Organization deserves praise for its impressive record of achievement as a forum for developing a sound international prescriptive regime and facilitating its effective implementation and enforcement. But lurking in the shadows of the IMO's prescriptive success story is a troubling number of flag States that have now delegated their prescriptive responsibilities to an international body, while at the same time largely outsourcing their enforcement responsibilities to classification societies, port States and States with extraterritorial enforcement capabilities. The result is a system in which, for some, flag State responsibility survives in principle, but is largely kept alive through the efforts of other States. One consequence is that the atmosphere of flag State complacency and passivity invites

and even encourages passivity by the operators of vessels registered in those States.

The responsibilities and competencies of States and international organizations responsible for maritime safety, security, and marine environmental protection and resource conservation are increasingly being called into question by those who are losing patience with an approach that relies so heavily on the ability and resolve of flag States to effectively exercise their jurisdiction and control over vessels they register. They have concluded that we cannot continue to operate under a fanciful vision of flag State responsibility. Doing so poses unacceptable risks to other States and the global commons and to the credibility and authority of the IMO.

It might therefore be time to admit that flag State primacy does not flow ineluctably from the principle of sovereign equality of States (or mistaken notions of “sovereignty” with respect to commercial vessels) and the attendant horizontal structure of international relations. If the IMO member States are truly committed to restoring public confidence in the safety, security, and environmental protection record of the shipping industry, as its strategic plan asserts, the Organization cannot be seen to be dragging its feet on the call to get tough of scofflaw ship operators and the flag States that enable them.³¹⁵ The VIMSAS and Code for the Implementation of Mandatory IMO Instruments hold considerable promise to do that, but only if backed up by a carefully balanced combination of meaningful incentives and sanctions. Should they fail to achieve the needed level of compliance it may be necessary to recalibrate the Thames Formula to provide greater complementarity in cases where flag States chronically fall short of international norms.

315. See Efthimios E. Mitropoulos, *Improving Shipping's Image*, IMO NEWS, No. 3, 2007, at 4.

