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Prevention of Vessel-Source Pollution in the South China Sea: What Role Can China Play?

Nengye Liu*

Abstract

This article examines China's role in the prevention of vessel-source pollution in the South China Sea. The article argues that, although the South China Sea is a disputed sea area, China has the potential to play a leading role to improve the prevention of vessel-source pollution in this area. By playing a key role in addressing the issue of vessel-source pollution China also has the opportunity to demonstrate its willingness to co-operate to protect the marine environment of the South China Sea without inflaming the thorny sovereignty disputes in the area. First, the sovereignty disputes in the South China Sea area are introduced. The legal options under international law for states to deal with vessel-source pollution are described. China's practice on the prevention of vessel-source pollution in the South China Sea as a flag state, coastal state and port state is discussed. Finally, the article suggests that China may promote a strengthened port state control system in the South China Sea area to improve the prevention of vessel-source pollution without stirring up sovereign disputes.

I *Introduction*

The South China Sea ('SCS') is a semi-enclosed sea that is part of the Pacific Ocean. It encompasses an area from the Singapore and Malacca Straits to the Strait of Taiwan of around 3.5 million square kilometres. To the Chinese people and in the Chinese language the 'South China Sea' is 'Nan-Hai', or literally 'South Sea' or 'Southern Sea', as it is situated to the south of China.¹

The SCS area is one of four major flashpoints in Asia; the other three are the Taiwan Strait, the North Korean nuclear program and the nuclear

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¹ Nien-Tsu Alfred Hu, 'Semi-Enclosed Troubled Waters: A New Thinking on the Application of the 1982 UNCLOS Article 123 to the South China Sea' (2010) 41 *Ocean Development and International Law* 299.

confrontation between India and Pakistan.² Several factors make it a flashpoint. The major factor is territorial disputes over the Paracel and Spratly archipelagos and maritime areas in the SCS.³ The SCS is surrounded by 10 coastal states, six of which have competing claims in the SCS area. Those states include China (mainland and Taiwan), Brunei Darussalam, Malaysia, Vietnam, the Philippines and Indonesia.⁴

Besides being a political flashpoint, the SCS is one of the world's richest marine biodiversity areas, with abundant and diverse marine resources.⁵ The Indo-West Pacific marine biogeographic province, which includes the South China Sea Large Marine Ecosystem (LME), is well recognised as a global centre of marine shallow-water, tropical biodiversity. Over 450 coral species have been recorded. Recent estimates suggest that approximately 2 million hectares of mangrove forest (12 per cent of the world total) are located in the countries bordering the LME. Six species of marine turtles, all considered to be either 'Endangered' or 'Vulnerable' by the IUCN, the dugong and several other species of marine mammal included on The IUCN Red List of Threatened Species are found in the SCS area.⁶ The SCS region's great natural wealth is affected by a number of marine uses, expanding populations, and economic activity.⁷ An example of the impact of these activities is that the original area of mangroves has decreased by about 70 per cent during the last 70 years.⁸

The *United Nations Convention on the Law of the Sea* ('UNCLOS') distinguishes sources of marine pollution as land-based activities, dumping, vessels, sea-bed activities, and activities in the area and from or through the

² Peter Kien-Hong Yu, 'Setting Up International (Adversary) Regimes in the South China Sea: Analyzing the Obstacles from a Chinese Perspective' (2007) 38 *Ocean Development and International Law* 147.

³ The other three reasons include the geostrategic location of the SCS; the competition for control over natural resources in the area; and the modernisation of the international law of the sea. See Nguyen Hong Thao and Ramses Amer, 'A New Legal Arrangement for the South China Sea?' (2009) 40 *Ocean Development and International Law* 333.

⁴ Indonesia does not involve itself in sovereign disputes over islands, but has the issue of maritime delimitation with neighboring countries in the SCS. Indonesia claims an exclusive economic zone ('EEZ') and continental shelf extending into the SCS to the north of the Anambas Islands and to the north and east of the Natuna Islands. For an overview of littoral States' claims in the SCS area, see *ibid* 334–5.

⁵ Yann-huei Song, 'A Marine Biodiversity Project in the South China Sea: Joint Efforts Made in the SCS Workshop Process' (2011) 26 *International Journal of Marine and Coastal Law* 121; see also John W McManus, Kwang-Tsao Shao and Szu-Yin Lin, 'Towards Establishing a Spratly Islands International Marine Peace Park: Ecological Importance and Supportive Collaborative Activities with an Emphasis on the Role of Taiwan' (2010) 41 *Ocean Development and International Law* 270, 271–3.

⁶ K Sherman and G Hempel (eds), *The Large Marine Ecosystem Report: A Perspective on Changing Conditions in LMEs of the World's Regional Seas*, UNEP, UNEP Regional Seas Reports and Studies No 182 (2008) 297.

⁷ Aldo Chircop, 'Regional Cooperation in Marine Environmental Protection in the South China Sea: A Reflection on New Directions for Marine Conservation' (2010) 41 *Ocean Development and International Law* 336.

⁸ Sherman and Hempel, *above* n 6, 304. For detailed reasons about the need for marine conservation in the SCS, see *ibid* 336–7.

atmosphere.⁹ Maritime transport is only responsible for 10 per cent of the total marine pollution.¹⁰ The United Nations Environment Programme ('UNEP') has assessed the extent of vessel-source pollution in the SCS area as moderate.¹¹ Nevertheless, prevention of vessel-source pollution, especially the operational pollution from vessels, is of particular importance for the SCS. The SCS contains some of the world's busiest international sea-lanes, as well as two of the world's busiest ports (Singapore and Hong Kong). As a result, shipping and harbour-related activities contribute significantly to the marine pollution of the area.¹²

Furthermore, the problem for the protection of marine environment in the SCS is that all of the parties involved in the SCS must tackle the crucial and thorny sovereignty issue.¹³ Any national/unilateral effort to deal with marine pollution in disputed areas might be considered by other parties to be sovereign action. By way of example, when China adopted its *Law on Islands Protection of the People's Republic of China* ('IPL') in 2009, Vietnam protested China's application of the IPL to the SCS.¹⁴ Article 123 of the *UNCLOS* provides that states bordering an enclosed or semi-enclosed sea should co-operate to co-ordinate the implementation of their rights and duties with respect to the protection and preservation of the marine environment. This was reaffirmed by the non-binding *Declaration on the Conduct of Parties in the South China Sea* ('DOC'), which indicated that parties may explore or undertake co-operative activities to protect the marine environment.¹⁵ Shipping is an activity with intensive communication between different states and individuals and is regulated by international conventions and the *UNCLOS*. Vessel-source pollution often affects more than one state.¹⁶ A complex international legal regime has been established to combat vessel-source pollution.¹⁷ It is necessary for littoral states of the SCS to co-operate in order to effectively prevent vessel-source pollution. In turn, the co-operation may contribute to trust building and disputes settlement of littoral states in the SCS area.

⁹ *United Nations Convention on the Law of the Sea*, opened for signature 10 December 1982, 1833 UNTS 3 (entered into force 16 November 1994) pt XII s 5.

¹⁰ IMO, *International Shipping Facts and Figures — Information Resources on Trade, Safety, Security, Environment* (Maritime Knowledge Center, 2011) 24.

¹¹ Sherman and Hempel, above n 6, 304.

¹² UNEP Coordinating Body on the Seas of East Asia, *State of the Marine Environment Report for the East Asian Seas* (2009) 26.

¹³ Yu, above n 2, 151.

¹⁴ Liu Nengye, 'Recent Developments Law on Island Protection of People's Republic of China' (2010) 2 *elni Review* 88.

¹⁵ The governments of the Member States of ASEAN and the government of the People's Republic of China signed the DOC in 2002; see art 7(a). See also Nguyen Hong Thao, 'The 2002 Declaration on the Conduct of Parties in the South China Sea: A Note' (2003) 34 *Ocean Development and International Law* 27,985.

¹⁶ Erik Jaap Molenaar, *Coastal State Jurisdiction over Vessel-Source Pollution* (Kluwer Law International, 1998) 18–19.

¹⁷ For a general idea about international law on the prevention of vessel-source pollution, see Liu Nengye, 'International Legal Framework on the Prevention of Vessel-Source Pollution' (2000) 12 *China Oceans Law Review* 2, 238.

China plays a dual role in the SCS area. It is not only a coastal state with an extensive coastline and exclusive economic zone ('EEZ') resource claims, but also an important shipping state with a large shipping fleet and a growing dependence on energy imports through the SCS.¹⁸ China has expressed its willingness to co-operate with other parties to protect the marine environment in the SCS area.

The issue of marine environmental protection is less sensitive than sovereign disputes among littoral parties of the SCS. This was recognised in the *DOC* and reaffirmed by the recently adopted *Agreement on General Principles of Guidelines for Solving China-Vietnam Sea Problems*.¹⁹ As a contracting party of the *UNCLOS*, China has the legal obligation to take co-operative measures to protect the marine environment of the SCS. This article examines China's role in the prevention of vessel-source pollution in the SCS. The article argues that, although the SCS is a disputed sea area, China has the potential to play a leading role to improve the prevention of vessel-source pollution in this area. By playing a key role in addressing the issue of vessel-source pollution, China also has the opportunity to demonstrate its willingness to co-operate to protect the marine environment of the SCS without inflaming the thorny sovereignty disputes in the area.

From August 2011 to February 2012, the author conducted semi-structured interviews in 10 major port cities along China's coast (Dalian, Guangzhou, Haikou, Tianjin, Ningbo, Qinhuangdao, Qingdao, Shanghai, Shenzhen and Yantai). Unpublished (except internally) documents from the China Maritime Safety Administration ('MSA') were collected. Interviews were conducted with representatives from the MSA as the MSA is the major competent authority for the prevention of vessel-source pollution in China. This research is therefore based on both desk-based sources and interviews. The article first describes the legal options under international law for states to prevent vessel-source pollution. Second, an outline of China's legal framework is provided. Then the article analyses China's current practice regarding the prevention of vessel-source pollution in the SCS. Finally, it is suggested that China may play a leading role to strengthen the port state control system in the SCS area.

II Legal Options under International Law

The regime for preventing vessel-source pollution is described in *UNCLOS* Parts XII ('Protection and Preservation of the Marine Environment'), II ('Territorial Sea and Contiguous Zone') and V ('Exclusive Economic Zone'). In the *UNCLOS*, a state's legislative or enforcement jurisdiction in respect of a

¹⁸ David Rosenberg and Christopher Chung, 'Maritime Security in the South China Sea: Coordinating Coastal and User State Priorities' (2008) 39 *Ocean Development and International Law* 58–9.

¹⁹ 《关于指导解决中华人民共和国和越南社会主义共和国海上问题基本原则协议》 See Foreign Affairs, P R China: <http://www.fmprc.gov.cn/mfa_chn/ziliao_611306/tytj_611312/t872687.shtml>

particular vessel varies depending on whether it is a flag, coastal or port state.²⁰ The *UNCLOS*'s allocation of state jurisdiction among flag, coastal and port states has created a jurisdictional regime with a safety net for the prevention of vessel-source pollution. The jurisdictional regime attempts to balance the interests of flag states in a system which safeguards the freedom of navigation and is globally uniform with the interests of coastal states in an optimal exercise of their jurisdiction for the protection and preservation of the marine environment.²¹ It reflects a carefully balanced compromise between states with maritime interests and states with coastal interests.²²

Art 211 of *UNCLOS* requires that flag states enact legislation that 'shall at least have the same effect as' that of generally accepted international rules and standards. International standards therefore form only a minimum threshold for legislative jurisdiction of flag states. When it comes to enforcement jurisdiction, art 217 provides that flag states must enforce violations of pollution laws applying to their ships, wherever committed.

Coastal state jurisdiction varies in the different maritime zones set out in the *UNCLOS*.²³ In the territorial sea, the coastal state may adopt laws and regulations without hampering innocent passage of foreign vessels (art 21(1)). However, such laws and regulations cannot apply to design, construction, manning or equipment of foreign ships unless they are giving effect to generally accepted international rules or standards (art 21(2)). In the EEZ, a coastal state may adopt pollution legislation for its EEZ which conforms with and gives effect to 'generally accepted international rules and standards established through the competent international organization or general diplomatic conference' (art 211(5)).

Where there are clear grounds for believing that a foreign vessel navigating in the territorial sea has violated laws and regulations of a coastal state, that coastal state may undertake physical inspection of the vessel and may, where the evidence so warrants, institute proceedings, including detention (art 220(2)). If the violation in the EEZ has resulted in 'a substantial discharge causing or threatening significant pollution of the marine environment', the coastal state may undertake physical inspection of the vessel for matters relating to the violation if the vessel has refused to give information or if the information supplied by the vessel is manifestly incorrect (art 220(5)). Where the violation

²⁰ Robin Churchill and Alan Lowe, *The Law of the Sea* (3rd ed, Manchester University Press, 1999) 344. A flag state is the state whose nationality a particular vessel has. LOSC does not define 'port' or 'coastal' state. According to Churchill and Lowe, the 'coastal state' is the state in one of whose maritime zones a particular vessel lies, while the 'port state' is the state in one of whose ports a particular vessel lies.

²¹ Molenaar, above n 16, 135.

²² Churchill and Lowe, above n 20, 346.

²³ For more discussion, see Christopher Mooradian, 'Protecting "Sovereign Rights": The Case for Increased Coastal State Jurisdiction over Vessel-Source Pollution in the Exclusive Economic Zone' (2002) 82 *Boston University Law Review* 767; see also Julian Roberts and Martin Tsamenyi, 'The Regulation of Navigation under International Law: A Tool for Protecting Sensitive Marine Environments' in Tafsir Malick Ndiaye and Rudiger Wolfrum (eds), *Law of the Sea, Environmental Law and Settlement of Disputes: Liber Amicorum Judge Thomas A Mensah* (Martinus Nijhoff Publishers, 2007) 787–810.

has resulted in ‘a discharge causing major damage or threat of major damage to the coastline or related interests of the coastal state, or to any resources of its territorial sea or EEZ’, the coastal state may institute proceedings, including detention of the vessel (art 220(6)).

The most radical innovations made to the enforcement of marine pollution standards by the *UNCLOS* concern the powers given to port States.²⁴ Port state control is a ‘safety net’ and in an ideal world would not be necessary.²⁵ Due to the unwillingness of some flag states to enforce the law, as well as the cost and difficulties of enforcement at sea, port state enforcement frequently plays an important part in preventing vessel-source pollution. Ports lie wholly within a state’s territory and therefore fall under the port state’s territorial sovereignty.

Customary international law acknowledges a port state’s wide discretion in exercising jurisdiction over its port.²⁶ It is generally agreed that a vessel’s right of access to ports is only a presumption, not an obligation, for port states.²⁷ This provides a legal basis for port state jurisdiction. The international legal principle is that, within a port, the host state has absolute jurisdiction over visiting vessels in the same manner as if the visiting vessel were a foreign citizen vacationing or doing business in the host country.²⁸ Under art 218 of *UNCLOS*, a port state has (optional, not mandatory) jurisdiction over any discharge/offence from a vessel, even if it occurs outside its internal waters, territorial sea or EEZ. In practice, control of foreign vessels by port states is based on non-binding Memoranda of Understanding (MOUs) in different regions of the world, such as the Paris MOU (European Union and North America)²⁹ and the Tokyo MOU (Asia-Pacific).³⁰

For the prevention of vessel-source pollution, the *UNCLOS* provisions can be read in conjunction with international conventions adopted under the auspices of the International Maritime Organization (IMO): the *International Convention for the Prevention of Pollution from Ships* (‘MARPOL’),³¹ the *International Convention for the Safety of Life at Sea* (‘SOLAS’),³² the *International Convention on the Control of Harmful Anti-fouling Systems on*

²⁴ Churchill and Lowe, above n 20, 350.

²⁵ The safety net has been created to prevent substandard ships from trading on the high seas. It consists of six main elements: international conventions of the IMO; conventions of the ILO; flag state control; classification societies; marine insurance industry; and port state control: Z. O. Ozcayir, *Port State Control* (LLP, 2001) 93.

²⁶ Erik Jaap Molenaar, ‘Port State Jurisdiction: Toward Comprehensive, Mandatory and Global Coverage’ (2007) 38 *Ocean Development & International Law* 227.

²⁷ Louis De La Fayette, ‘Access to Ports in International Law’ (1996) 11 *International Journal of Marine and Coastal Law* 1.

²⁸ Ted L. McDorman, ‘Regional Port State Control Agreements: Some Issues of International Law’ (2000) 5 *Ocean and Coastal Law Journal* 210.

²⁹ See <<http://www.parismou.org/>>.

³⁰ See <<http://www.tokyo-mou.org/>>.

³¹ *International Convention for the Prevention of Pollution from Ships*, opened for signature 2 November 1973, 1340 UNTS 184 (entered into force 2 October 1983).

³² *International Convention for the Safety of Life at Sea*, opened for signature 1 November 1974, 1184 UNTS 2 (entered into force 25 May 1980).

*Ships ('Anti-Fouling Convention')*³³ and the *International Convention for the Control and Management of Ships' Ballast Water and Sediments ('BWM Convention')*.³⁴ MARPOL and its amendments cover all technical aspects relating to the prevention and reduction of pollution from ships, except the disposal of waste into the sea by dumping. SOLAS provides regulations for maritime safety. SOLAS Regulation V/10 establishes that ships' routeing systems:

are recommended for use by, and may be made mandatory for, all ships, certain categories of ships or ships carrying certain cargoes, when adopted and implemented in accordance with the guidelines and criteria developed by the organization.

SOLAS Regulation V/11-3 enables states to adopt and implement mandatory ship reporting in accordance with guidelines and criteria developed by the IMO. SOLAS Regulation V/12 deals with vessel traffic services. Regulation V/123 provides that the use of a vessel traffic service may only be made mandatory in sea areas within the territorial sea of a coastal state.

III **General Framework of Chinese Law**

China has 18 000 km of mainland coastline and 6900 islands each with an area larger than 500 square kilometres. The total sea area claimed under China's jurisdiction is about 3 million square kilometres. This includes the Bohai Sea and the sea areas in the Yellow Sea, East China Sea and SCS. China is also a major maritime nation. Rapid economic development has had consequences for foreign trade, energy production and energy consumption. The last three decades have witnessed immense growth in the Chinese shipping industry. To date, 90 per cent of China's exports and imports are carried by maritime transport.³⁵ In 2010, Chinese ownership of vessels ranked fourth in the world. Chinese shipowners control 8.63 per cent of the total world tonnage.³⁶ China is the world's leading export nation and an important importer of goods and raw materials. It is also an important origin and destination of international maritime trade.³⁷

The risk of pollution from ships and major pollution accidents is increasing in sea areas under China's jurisdiction. For example, China is now the second largest oil consumption country in the world. In 2010, China imported

³³ *International Convention on the Control of Harmful Anti-Fouling Systems for Ships*, opened for signature 5 October 2001 (entered into force 17 September 2008).

³⁴ *International Convention on Ballast Water Management for Ships*, opened for signature 13 February 2004 (not yet in force).

³⁵ 国务院法制办、交通运输部组织编写 [Ministry of Transport and Legislative Affairs Office of State Council of the People's Republic of China]; 《中华人民共和国防治船舶污染海洋环境管理条例释义》 [The Legislative Interpretation of 2010 Regulation on the Prevention and Control of Marine Pollution from Vessels] (人民交通出版社 [China Communications Press], 2010) 1.

³⁶ United Nations Conference on Trade and Development, *Review of Maritime Transport* (2011), 43 <http://www.unctad.org/en/docs/rmt2011_en.pdf>.

³⁷ Ibid 1.

239.31 million tons of crude oil and 36.88 million tons of refined oil.³⁸ Ninety-five per cent of this was carried by maritime transport. This creates a considerable risk of vessel-source pollution.

Over the last three decades China has adopted the *UNCLOS* and most international conventions on the regulation of vessel-source pollution. China has also promulgated a series of statutes and regulations to address the threat of such pollution.³⁹ These include the 1983 Maritime Transport Safety Law ('*MTSL*'),⁴⁰ the 1982 Marine Environmental Protection Law ('*1982 MEPL*'),⁴¹ as amended in 1999 ('*1999 MEPL*') and, more recently, the Islands Protection Law ('*IPL*'), adopted in 2009.⁴² This was followed by the adoption of the Regulation on the Prevention and Control of Marine Pollution from Vessels ('*2010 Regulation*') in 2010.⁴³ The *2010 Regulation* replaced the Regulation on the Prevention and Control of Vessel-Source Pollution ('*1983 Regulation*'). China is also actively involved in the ratification and implementation of relevant international conventions dealing with vessel-source pollution.

A Institutions

There are several authorities that are involved in law enforcement in sea areas under China's jurisdiction. These include the Sea Police of the Border Control Department of the Ministry of Public Security ('公安部海警'), the Maritime Safety Administration ('MSA'/'交通部海事局') of the Ministry of Transport, the State Fisheries Administration of the Ministry of Agriculture ('农业部渔政局'), the China Marine Surveillance ('CMS'/'中国海监') of the State Oceanic Administration ('SOA'/'国家海洋局'), the Bureau of Anti-Smuggling of the

³⁸ 中华人民共和国国家统计局 [National Bureau of Statistics of the People's Republic of China], 中华人民共和国2010年国民经济和社会发展统计公报 [2010 National Report on Economic and Social Development Statistics], 表9 [Table 9] (28 February 2011) <http://www.stats.gov.cn/tjgb/ndtjgb/qgndtjgb/t20110228_402705692.htm>.

³⁹ The Constitution of the People's Republic of China vests the power of national law-making in the National People's Congress and its Standing Committee. It also grants the State Council the power to adopt regulations in accordance with the Constitution and laws. Ministries and Commissions under the State Council are authorised to issue rules within their respective jurisdictions and in accordance with the laws and regulations. For details about hierarchy of the Chinese legal system and law-making in China, see Jianfu Chen, *Chinese Law: Context and Transformation* (Martinus Nijhoff Publishers, 2008) 171.

⁴⁰ 《中华人民共和国海上交通安全法》 [Maritime Transport Safety Law of the People's Republic of China] (People's Republic of China) National People's Congress Standing Committee, Order No 7, 2 September 1983.

⁴¹ 《中华人民共和国海洋环境保护法》 [Marine Environment Protection Law of the People's Republic of China] (People's Republic of China) National People's Congress Standing Committee, Order No 26, 25 December 1999.

⁴² 《中华人民共和国海岛保护法》 [Islands Protection Law of the People's Republic of China] (People's Republic of China) National People's Congress Standing Committee, Order No 22, 26 December 2009.

⁴³ 《防治船舶污染海洋环境管理条例》 [Regulations on Administration of Prevention and Control of Pollution to the Marine Environment by Vessels] (People's Republic of China) State Council, Order No 561, 9 September 2009.

China Customs (‘中国海关缉私局’) and China Sea Rescue and Search Administration of the Ministry of Transport (‘交通部救助打捞局’). Zou points out that most laws and regulations contain a provision which designates the competent authority for implementing legislation.⁴⁴ Both the *1999 MEPL* and the *2010 Regulation* have designated the MSA as the responsible institution for marine pollution caused by non-military vessels. Art 5(3) of the *1999 MEPL* provides that:

The State administrative department in charge of maritime affairs shall be responsible for the supervision and control of marine environment pollution caused by non-military vessels inside the port waters under its jurisdiction and non-fishery vessels and non-military vessels outside the said port waters, and be responsible for the investigation and treatment of the pollution accidents. In the event of a pollution accident caused by a foreign vessel navigating, berthing or operating in the sea under the jurisdiction of the People’s Republic of China, inspection and treatment shall be conducted on board the vessel in question. Where the pollution accident caused by a vessel results in fishery damages, the competent fishery administrative department shall be invited to take part in the investigation and treatment.

Art 4 of the *2010 Regulation* states that:

The State administrative department in charge of maritime affairs shall be responsible for the supervision and control over marine environment pollution caused by non-military vessels inside the port waters under its jurisdiction and non-fishery vessels and non-military vessels outside the said port waters. According to this Regulation, the maritime safety administration is responsible for specific supervision and administration of vessel-source pollution and relevant activities.

The MSA is affiliated with the Ministry of Transport. The headquarters of the MSA are based in Beijing. Along the coastline, there are 12 provincial MSAs, under which local branches have been established. The MSA has a working team of 25 000 officials and other working staff and a patrol force of 1300 vessels and crafts of various types.⁴⁵ The MSA’s enforcing power at sea is the China Sea Patrol (‘中国海巡’). It is still a weak power at sea, especially in China’s EEZs. To date, the MSA has a total of 207 patrol vessels over 20 meters and above. Only the two patrols vessels of 100-plus meters (‘海巡31’ and ‘海巡21’) are responsible for the cruise and emergency response beyond the waters 50 nautical miles off the shore.⁴⁶

The SOA is affiliated with the Ministry of Land and Resources. The *1999 MEPL* vests the SOA with responsibility for the supervision and administration of the marine environment, survey organisation, surveillance, supervision, assessment of the marine environment, scientific research and nationwide

⁴⁴ Keyuan Zou ‘China’s Ocean Policy Making: Practice and Lessons’ (2012) 40 *Coastal Management* 152.

⁴⁵ China MSA, *Major Functions* <<http://en.msa.gov.cn/msa/features/root/01/0104/1224132186529>>.

⁴⁶ China MSA, *Maritime Equipment* <<http://en.msa.gov.cn/msa/features/root/01/0103/010302>>.

environmental protection to prevent and control marine pollution caused by marine construction projects and the dumping of wastes in the sea.⁴⁷ The CMS, China's main marine environmental protection enforcing power at sea, is controlled by the SOA. The MSA and SOA are obligated to co-operate on the issue of vessel-source pollution surveillance.⁴⁸ However, neither has authority to prevent illegal discharge from vessels. In practice, the CMS rarely reports illegal discharge from vessels to the MSA. Sometimes, the CMS fines a vessel directly. This goes beyond the authority granted to the SOA.

B Legislation

1 Marine Environment Protection Law

The Marine Environment Protection Law was adopted in 1982 at the initial stage of China's open door and economic reform policy. It was amended in 1999 in conjunction with China's ratification of the *UNCLOS*.⁴⁹ The *1999 MEPL* is the most important law for the protection of the marine environment under China's jurisdiction. It applies to the internal waters, territorial seas, contiguous zones, EEZs and continental shelves of China and all other sea areas under the jurisdiction of China.⁵⁰ The *1999 MEPL* also applies to pollution to China's sea areas originating from sea areas beyond China's jurisdiction.⁵¹ Chapter 8 deals specifically with vessel-source pollution.

According to art 62(1) of the *1999 MEPL*, no vessels or their related operations may discharge into the sea areas under the jurisdiction of China any pollutants, wastes, ballast water, vessel garbage or other harmful substances in violation of the provisions of this law. The *1999 MEPL* requires all ships to possess anti-pollution equipment. Moreover, ports, harbours, loading stations and shipyards must be equipped with reception facilities.⁵²

The *1999 MEPL* also calls for the establishment of an oil pollution insurance and compensation fund.⁵³

2 Maritime Transport Safety Law

The Maritime Transport Safety Law ('*MTSL*') was adopted in 1983. It applies to all vessels, installations and personnel and to the owners and managers of such vessels and installations that navigate, berth or operate in the sea areas under

⁴⁷ *1999 MEPL* art 5(2).

⁴⁸ *2010 Regulation* art 7: 'MSA shall establish and strengthen cooperation with SOA for monitoring marine pollution caused by vessels and relevant activities.'

⁴⁹ For more details about China's marine environment protection law, see Keyuan Zou, 'The Establishment of a Marine Legal System in China' (1998) 13 *International Journal of Marine and Coastal Law* 23; see also Keyuan Zou, 'Implementing Marine Environmental Protection Law in China: Progress, Problems and Prospects' (1999) 23 *Marine Policy* 207–25.

⁵⁰ *1999 MEPL* art 2(1).

⁵¹ *Ibid* art 2(3).

⁵² *Ibid* art 62(2).

⁵³ *Ibid* art 66.

China's jurisdiction. The *MTSL* provides the legal basis for the MSA to implement port state control. Article 19 provides that the MSA has the right to prohibit a vessel or an installation from leaving a port and to order it to suspend its voyage, change its route or cease its operations when it violates any law, regulation or other rule of China.

The *MTSL* has not been amended for almost 30 years, and some provisions are quite outdated. For example, it provides that the China Harbour Superintendency Administration is the competent authority for maritime safety in sea areas under China's jurisdiction.⁵⁴ However, the Harbour Superintendency Administration no longer exists. It was replaced by the MSA in 1998.

3 *Islands Protection Law*

The Islands Protection Law entered into force on 1 March 2010. It is the most important and most recent Chinese law focusing on the protection of the environment of islands and sea areas surrounding them.

An 'island' in the *IPL* is defined in accordance with art 121 of *UNCLOS* as a naturally formed area of land, surrounded by water, which is above water at high tide, including inhabited and uninhabited islands.⁵⁵ The SOA is responsible for the implementation and enforcement of the *IPL*.⁵⁶

Chapter 3 is the most important chapter in the *IPL*. It provides detailed measures for the protection of inhabited and uninhabited islands, as well as islands for special use, such as military use and basepoints. Damaging coral and coral reefs and the destruction of mangroves around islands are also prohibited.⁵⁷ Scientific research that does not damage the environment is permitted.⁵⁸

Chapters 4, 5 and 6 of the *IPL* focus on implementation, liability and miscellaneous provisions. The *IPL* provides that the SOA must be in charge of the protection of uninhabited islands. Moreover, the SOA and its CMS are authorised to deal with the protection of the marine environment around islands.⁵⁹ The *IPL*, with the reference to the 1999 *MEPL* and the Law on the Use and Administration of Sea Areas of the People's Republic of China,⁶⁰ set

⁵⁴ *MTSL* art 3.

⁵⁵ *IPL* art 2(1).

⁵⁶ *Ibid* art 5.

⁵⁷ *Ibid* art 16(2).

⁵⁸ *Ibid* art 18.

⁵⁹ *Ibid* art 41.

⁶⁰ 《中华人民共和国海域使用管理法》[Law of the People's Republic of China on the Administration of the Use of Sea Areas] (People's Republic of China) National People's Congress Standing Committee, Order No 61, 27 October 2001.

detailed administrative measures in case of violation.⁶¹ Criminal sanctions are also a possible cause of action.⁶²

4 2010 Regulation on the Prevention and Control of Vessel-Source Pollution

Internal and external forces led to the adoption of the *2010 Regulation*, which replaced the corresponding *1983 Regulation*. As mentioned above, there is a significant risk of a serious oil spill accident in Chinese coastal waters. The *MEPL* was amended in 1999. New measures for the regulation of vessel-source pollution, including oil spill contingency plans, mandatory insurance and the establishment of an oil pollution compensation fund, were incorporated. These measures needed to be further implemented by more detailed regulations and rules. Legislators believed that the *1983 Regulation* was outdated and an updated regulation was necessary.⁶³

In the international sphere, *MARPOL* and *SOLAS* have undergone significant developments in the past 20 years. International organisations and other countries, such as the European Union (after the *Erika* and the *Prestige*), the United States (after the *Exxon Valdez* oil tanker disaster in 1989) and South Korea (after the *Hebei Spirit* disaster in 2007) have strengthened their vessel-source pollution legislation. This has created further pressure on China to improve the protection of its marine environment from vessel-source pollution. The concern is that, if appropriate environmental regulations are not in place, China's booming economy may attract irresponsible ship owners and substandard vessels into Chinese coastal waters from other areas of the world.

For the prevention of operational vessel-source pollution, art 15 of the *2010 Regulation* is important for the implementation of *MARPOL*:

vessels should obey domestic legislation, international conventions as well as relevant standards to prevent atmospheric pollution and to prevent and control discharges of garbage, sewage, oil-containing waste water, hazardous and noxious waste and ballast water into sea areas within China's jurisdiction. Otherwise, pollutants that are not allowed to be discharged should be delivered to reception facilities.

With respect to the prevention of accidental pollution, the *2010 Regulation* defines an 'accident' as 'marine pollution caused by oil or oily mixtures, as well as other hazardous and noxious waste, leaking from vessels and relevant operating activities' (for example, ship building and ship

⁶¹ For example, *IPL* art 49: 'Illegal discharges to an island or into its surrounding waters shall be punished according to the relevant law on environmental protection.'

⁶² *IPL* art 55: 'In violation of this Law shall be subject to criminal liability if a crime is committed. Anyone causes damage to the ecosystems of an island and its surrounding waters shall assume civil liability.'

⁶³ 国务院法制办负责人就《防治船舶污染海洋环境管理条例》答记者问 [Press Release about 2010 Regulation by Legislative Affairs Office of the State Council] <www.gov.cn/zwhd/2009-09/16/content_1418816.htm>.

dismantling).⁶⁴ Article 36 provides a detailed categorisation of the severity of accidents based on the amount of oil spilled or their direct economic losses.⁶⁵

Several other issues related to preventing vessel-source pollution are covered by the *2010 Regulation*. First, operators of any vessel carrying noxious liquid substances in bulk or any other vessel of 10 000 gross tonnages and above must conclude a pollution clean-up contract with a company approved by the MSA before entering and leaving any Chinese port. The contract must specify the rights and duties of the vessel and companies in the case of an accident.⁶⁶ The Ministry of Transport has issued Rules on the Management of Contingency Plan for Vessel-Source Marine Pollution that contain specifications of the required qualifications for pollution clean-up companies, as well as the terms of the pollution clean-up contract.⁶⁷

Second, vessels carrying dangerous cargo need approval from the MSA before entering or leaving any Chinese port.⁶⁸ In 2011, the MSA published the list of dangerous cargoes, which follows the IMDG Code.⁶⁹ Docks and loading and unloading facilities in ports are prohibited from providing services to vessels disqualified for carrying dangerous cargo in packed form.⁷⁰

Third, the *2010 Regulation* does not refer to any ship routing or reporting system to regulate vessels carrying dangerous cargo. However, there is a legal basis for vessel reporting in two rules issued by the Ministry of Transport in 1997 (Rules on Vessel Traffic System Safety Management⁷¹ and Rules on Vessel Traffic System Operation Management⁷²).

Article 31 of the *2010 Regulation* concerns the prevention of marine pollution from hazardous wastes listed in annex I of the *Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal*⁷³

⁶⁴ *2010 Regulation* art 35.

⁶⁵ Ibid art 36: 'There are 4 categories of vessel-source pollution accidents, the most serious accidents (above 1000 tons or 200 million RMB loss), very serious accidents (500–1000 tons or 100–200 million RMB), serious accidents (100–500 tons or 50–100 million RMB) and accidents (less than 100 tons or 50 million RMB).'

⁶⁶ Ibid art 33.

⁶⁷ 《中华人民共和国船舶污染海洋环境应急防备和应急处置管理规定》 [Rules on the Management of Contingency Plan for Vessel-Source Marine Pollution] (People's Republic of China) Ministry of Transport, Order No 4, 27 January 2011.

⁶⁸ *2010 Regulation* art 22.

⁶⁹ 《关于发布海运污染危害型货物名录的通知》 [Circular on the Adoption of the List of Dangerous Cargoes Carried by Sea] (People's Republic of China) Maritime Safety Administration, 15 February 2011.

⁷⁰ *2010 Regulation* art 21(1).

⁷¹ 《中华人民共和国船舶交通管理系统安全监督管理规则》 [Rules on Vessel Traffic System Safety Management] (People's Republic of China) Ministry of Transport, Order No 8, 15 September 1997.

⁷² 《关于颁布《船舶交通管理系统运行管理规定》、《VTS用户指南》的通知》 [Circular on the Adoption of the Rule on Vessel Traffic System Operation Management and VTS Users Guidelines] (People's Republic of China) Ministry of Transport, 4 November 1997.

⁷³ *Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal*, opened for signature 22 March 1989, 1673 UNTS 57 (entered into force 5 May 1992).

(‘*Basel Convention*’).⁷⁴ In the preamble of the *Basel Convention*, it is recognised that a state has the sovereign right to ban the entry or disposal of foreign hazardous wastes and other wastes into its territory. As a contracting party to the *Basel Convention*, China has banned the transit of hazardous wastes within its internal waters and territorial sea.⁷⁵ In other sea areas under China’s jurisdiction (for example, EEZs) vessels should sail with a paper approval from the Ministry of Environmental Protection, in the sea lane designated by the MSA, and regularly report their position to the MSA.⁷⁶

IV Chinese Practice in the SCS

A China as a flag state

Shortly after the adoption of the *2010 Regulation*, the MSA issued a schedule to phase out single-hull tankers from domestic trading. Since 1 January 2010, newly-built tankers of 600 deadweight tonnes (DWT) and above must have double hulls. Existing single-hull tankers of 5000 DWT and above must be phased out after 2011. Further to this, in order to strengthen flag state control, art 11 of the *2010 Regulation* requires all ship owners, operators and managers of Chinese flagged vessels to establish a safe operation system for preventing vessel-source pollution. This is consistent with the obligation of Chinese vessels to apply the International Safety Management (ISM) Code, which is made mandatory through *SOLAS*.

In 2010, Chinese flag detention rate was only 1.18 per cent in the Asia-Pacific region, compared to Vietnam (8.59 per cent), the Philippines (3.76 per cent), Malaysia (3.77 per cent) and Indonesia (12.20 per cent).⁷⁷ Moreover, the Chinese flag is on the white list published by the Tokyo MOU. From 2008 to 2010, 2064 Chinese flags were inspected by maritime authorities under the Tokyo MOU, and only 26 vessels were detained. The three-year rolling average (2008–10) detention rate of Chinese flagged vessels is only 1.26 per cent.⁷⁸ It is fair to say that Chinese vessels have behaved well in the SCS area.

B China as a coastal state

China defines its EEZ as the area beyond and adjacent to its territorial sea of 12 nautical miles. This extends up to 200 nautical miles from the baseline⁷⁹ from

⁷⁴ ‘United Nations Environment Programme Conference of Plenipotentiaries on the Global Convention on the Control of Transboundary Movements of Hazardous Wastes: Final Act and Text of Basel Convention’ (1989) 28 *International Legal Materials* 649–86.

⁷⁵ *2010 Regulation* art 39.

⁷⁶ *Ibid* art 31.

⁷⁷ Detention of the ship is the last course of action that a PSCO would take upon finding deficiencies aboard the vessel: Tokyo MOU, *2010 Annual Report*, 24 <<http://www.tokyo-mou.org/ANN10.pdf>>.

⁷⁸ *Ibid* 32–3.

⁷⁹ The method of straight baselines is used. 《中华人民共和国领海及毗连区法》 [Territorial Sea and Contiguous Zone Law of the People’s Republic of China] (People’s Republic of China) National People’s Congress Standing Committee, Order No 55, 25 February 1992, art 2. In 1996,

which the breadth of the territorial sea is measured.⁸⁰ As mentioned above, the 1999 MEPL applies to the internal waters, territorial seas, contiguous zones, EEZs and continental shelves of China and to all other sea areas under the jurisdiction of China. This has raised concerns outside China that China might enforce its vessel-source pollution legislation in disputed sea areas, such as the SCS.

The Chinese government intends to strengthen its non-military presence in disputed sea areas. The 2011 Rules on the Administration of Patrols at Sea declare that one of the key reasons for the MSA's patrol at sea is to protect China's sovereignty and national ocean interests.⁸¹ This point was not included in the previous 2000 Rules on the Administration of Patrols at Sea.

The MSA's enforcement power at sea, China Sea Patrol ('海巡'), developed very quickly over the past five years. As mentioned above, there are several departments responsible for enforcing Chinese legislation at sea. Co-ordination regimes between different departments are in place. For example, in 2009, the Ministry of Transport and the Ministry of Agriculture signed a Memorandum of Understanding for Safety Management at Sea. The Memorandum of Understanding requires the two Ministries to hold information exchange meetings once or twice a year. The Memorandum of Understanding indicates that the MSA and Fisheries Administration may conduct joint law enforcement campaigns at sea for the prevention of vessel-source pollution.⁸²

At the 2012 National People's Congress, a proposal was submitted from members of the Congress to establish a Chinese Coast Guard.⁸³ This is a positive move to better co-ordinate different powers at sea. However, it raises the question of which department will play the lead role in the proposed Coast Guard. Every department wants to demonstrate its capabilities to decision-makers in the State Council. The MSA is therefore eager to build more large vessels to enhance its competitiveness among other departments, especially the CMS that is affiliated with the SOA.

part of the baselines around the mainland and the Xisha (Paracel) Islands were publicised: 《中华人民共和国政府关于中华人民共和国领海基线的声明》 [Declaration on the Baseline of the Territorial Sea of People's Republic of China] Ministry of Foreign Affairs, 15 May 1996.

⁸⁰ 《中华人民共和国专属经济区和大陆架法》 [Exclusive Economic Zone and Continental Shelf Law of the People's Republic of China] (People's Republic of China) National People's Congress Standing Committee, Order No 6, 26 June 1998, art 2(1).

⁸¹ 《关于印发《中华人民共和国海事局水上巡航工作规范》(试行)的通知》 [Circular on the Adoption of Rules on the Administration of Patrols at Sea] (People's Republic of China) Ministry of Transport, 16 February 2011, art 1.

⁸² 《关于印发交通运输部农业部水上安全管理合作备忘录的通知》 [Circular on the Memorandum of Understanding on Co-operation and Administration of Safety Management at Sea Between the Ministry of Transport and the Ministry of Agriculture] (People's Republic of China) Ministry of Transport, 4 January 2010.

⁸³ 罗援少将建议设海岸警卫队 减少海上执法内耗 [General Luo Yuan Suggested Establishing the China Coast Guard to Co-ordinate Law Enforcement at Sea] (5 March 2012) <<http://news.qq.com/a/20120305/001477.htm>>.

The MSA is required to patrol sea areas under China's jurisdiction for maritime safety and prevention of vessel-source pollution.⁸⁴ However, to date, most vessels cannot travel long distances and, traditionally, MSA vessels only patrol port areas or travel along the coast. For example, the Wu Song Unit of the Shanghai MSA is in charge of the estuary of the Yangtze River. The unit has only 11 vessels.⁸⁵ Its main function is to control traffic within the shipping routes of the estuary of the Yangtze River. According to the Guiding Principles for the Development of Chinese Maritime Affairs (2005–20) published by the Ministry of Transport, MSA vessels only expanded their patrol areas to 200 nautical miles from China's coast line since 2010,⁸⁶ which suggests that China's capacity to enforce its marine environment protection legislation at sea is still quite weak.

China has expressed its willingness to co-operate with other parties in the SCS to protect the marine environment. This was affirmed in the Declaration on the Conduct of Parties in the South China Sea (DOC), signed by the member states of the Association of Southeast Asian Nations (ASEAN) and China in 2002.⁸⁷ In 2011, the Agreement on General Principles of Guidelines for Solving Chinese-Vietnamese Sea Problems was adopted. Article 5 provides that China and Vietnam will promote co-operation regarding less sensitive issues than sovereign disputes, such as marine environmental protection in the SCS.⁸⁸ China has also been actively involved with regional sea programs, such as the UNEP East Asian Seas Action Plan and the Partnerships in Environmental Management for the Seas of East Asia (PEMSEA).

In the SCS area, most ship routeing and ship reporting measures are set in the Strait of Malacca and Strait of Singapore.⁸⁹ There are only traffic separation schemes in the approaches to Hong Kong, China in the East Lamma and Tathong Channels.⁹⁰ To date, China has established 16 mandatory shipping routes along its coastal waters, of which 15 are traffic separation schemes.⁹¹ In 2011, the Ministry of Transport published the National Plan for Ship Routeing in Coastal

⁸⁴ 《关于印发《中华人民共和国海事局水上巡航工作规范》（试行）的通知》[Circular on the Adoption of Rules on the Administration of Patrols at Sea] (People's Republic of China) Ministry of Transport, 16 February 2011, art 1.

⁸⁵ 上海吴淞海事处简介 [Introduction to the Wusong Unit of Shanghai MSA] <<http://www.shwsmsa.cn/nr.aspx?id=1>>.

⁸⁶ 刘功臣 [Liu Gongchen], 《中国海事“十一五”新发展》[Achievements of China Maritime Safety Administration in the 11th Five Years Plan Period] (2006) 2 中国水运 *China Water Transport* 8–9.

⁸⁷ Art 7 declares that, pending a comprehensive and durable settlement of the disputes, the parties concerned may explore or undertake co-operative activities, including marine environmental protection: *The 2002 Declaration on the Conduct of Parties in the South China Sea* <<http://www.asean.org/asean/external-relations/china/item/declaration-on-the-conduct-of-parties-in-the-south-china-sea>>.

⁸⁸ 《关于指导解决中国和越南海上问题基本原则协议》[Agreement on General Principles of Guidelines for Solving China–Vietnam Sea Problems] 11 October 2011, art 5.

⁸⁹ *Ships' Routeing*, Version 2.0 (IMO, April 2000) 140.

⁹⁰ *Ibid* 158.

⁹¹ 汪满明 [Wang Manning], 《中国沿海船舶定线制“制”在必行》[The Urgent Need to Implement Ship Routeing System in the Coastal Waters of China] (2011) 11 中国海事 *China Maritime Safety* 6.

Sea Areas. In the coming 10 years, a total of 26 shipping routes will be designated. This includes six trunk lines (Laotieshan Shuidao,⁹² Cheng Shan Jiao,⁹³ Estuary of Yangtze River, Taiwan Strait, Estuary of Pearl River and Qiongzhou Strait), five port areas (Dalian, Qingdao, Rizhao, Ningbo and Xiamen) and 15 other lines.⁹⁴ All these shipping routes are within China's territorial sea or in its internal waters or port areas. In general, it is fair to say that China is a modest coastal state in the SCS.

C *China as a port state*

According to the 2009 Vessel Safety Inspection Rules of the People's Republic of China, vessel safety inspection includes flag state control and port state control. When a Chinese vessel engaged in international voyages cannot return to a Chinese port for more than two years, the MSA is entitled to conduct safety inspections in the port where the vessel is located.⁹⁵ The *M.T.S.L.* provides the legal basis for the MSA to exercise port state control. The 2009 Vessel Safety Inspection Rules provide detailed requirements and procedures to be followed.

Chinese ports (Shenzhen and Guangzhou) bordering the SCS area are among the 10 busiest ports in the world. Other major Chinese ports, such as Shanghai, Ningbo and Qingdao, are served by the shipping routes that traverse these ports.⁹⁶ The MSA and its counterpart maritime authorities from Vietnam, Malaysia, Indonesia and the Philippines are signatories to the Tokyo MOU. The 2010 Annual Report of the Tokyo MOU states that the inspection rate of port state control carried out by Chinese maritime authority is 33 per cent, while the detention rate is 10.26 per cent. The detention rate of Chinese maritime authority is much higher than that of other littoral states within the SCS area (Vietnam 5.06 per cent, the Philippines 0.22 per and Malaysia 1.82 per cent) and almost two times higher than the region's average.⁹⁷ The headquarters of the MSA sets annual port state control inspection rate targets for its branches. These targets are based on the number of vessels that entered the port in the previous year. It is unclear whether similar targets are set for detention rates. On one hand, detention rates show the desire of the maritime authorities to rectify defects of vessels. For example, the detention rate of the Tianjin MSA is the highest among all Asia-Pacific ports under the Tokyo MOU in 2008. This was seen as a positive

⁹² Marine World Database, Laotieshan Shuidao (3 December 2009) <<http://www.anchorageworld.com/content/laotieshan-shuidao>>.

⁹³ VTS, *China Cheng Shang Jiao* (2012) <<http://www.worldvtsguide.org/MenuPages/China/Chengshanjiao.html>>.

⁹⁴ 中华人民共和国交通运输部 [Ministry of Transport of the Peoples' Republic of China], 沿海交通密集去三五年内实施船舶定线制 [Ship Routeing will be Designated in Busy Traffic Sea Areas in the Coming Three to Five Years] (23 December 2011) <http://www.moc.gov.cn/zhuzhan/jiaotongxinwen/xinwenredian/201112xinwen/20111223_1175907.html>.

⁹⁵ 《中华人民共和国船舶安全检查规则》 [Vessel Safety Inspection Rules of the People's Republic of China] (People's Republic of China) Ministry of Transport, Order No 15, 30 November 2009, art 20(2).

⁹⁶ *Review of Maritime Transport* (2011), above n 36, 86–7.

⁹⁷ *2010 Annual Report of the Tokyo MOU*, above n 77, 22.

achievement by the Headquarter of MSA.⁹⁸ On the other hand, competition to achieve high detention rates might cause problems for the shipping industry if vessels are detained at the discretion of the MSAs.

V Prospects: Towards a Strengthened Port State Control System in the SCS

In the author's opinion, there is a specific measure China can promote to prevent vessel-source pollution in the SCS, which is to strengthen port state control. The European Union's (EU) practice may provide inspiration for China to consider⁹⁹

Port state control in the EU is one of most successful examples of the EU's internal influence on the prevention of vessel-source pollution. The Paris MOU is the earliest, as well as the most advanced, regional MOU in the world, consisting of 27 participating maritime administrations from the waters of the European coastal states. The EU made use of its competence by adopting Directive 95/21/EC,¹⁰⁰ which pre-empted national law and upgraded the commitments of the Paris MOU, making them binding and uniform.¹⁰¹ Subsequently amended, the Directive constituted the main pillar of community action in the EU's battle against ships that fall short of international safety standards.¹⁰²

After the 1999 *Erika* oil tanker spill disaster, Directive 2001/106/EC¹⁰³ was enacted as a part of the *Erika* I package in order to make compulsory, rather than discretionary, the inspection system of certain potentially dangerous ships, tighten up regulations relating to manifestly substandard ships and ensure more effective implementation of Directive 95/21/EC. In the aftermath of the *Prestige* oil tanker spill disaster, the new EU Regulation 1726/2003 introduced an immediate ban on the transport of heavy-grade oil (HGO) in single-hulled tankers and laid down that, in future, only double-hulled vessels would be

⁹⁸ 周驰·黄树兴·刘培·赵海军 [Zhou Chi, Huang Shuxing, Liu Pei and Zhao Haijun], 《我国PSC检查亮点频现》[Highlights of Port State Control Practice in China] (2011) 6 中国海事 *China Maritime Safety* 20.

⁹⁹ For EU practice on the prevention of vessel-source pollution, see Liu Nengye, 'The European Union's Role in the Prevention of Vessel-Source Pollution and its Internal Influence' (2009) 15 *Journal of International Maritime Law* 411.

¹⁰⁰ Council Directive 95/21/EC Concerning the Enforcement, in Respect of Shipping Using Community Ports and Sailing in the Waters under the Jurisdiction of the Member States, of International Standards for Ship Safety, Pollution Prevention and Shipboard Living and Working Conditions (Port State Control) [1995] OJ L 157.

¹⁰¹ R Salvarini, 'The EC Directive on Port State Control: A Policy Statement' (1996) 11 *International Journal of Marine and Coastal Law* 228.

¹⁰² Communication from the Commission to the European Parliament and the Council on the Safety of the Seaborne Oil Trade COM (2000) 142.

¹⁰³ Directive 2001/106/EC of the European Parliament and of the Council of 19 December 2001 Amending Directive 95/21/EC of 19 June 1995 Concerning the Enforcement, in Respect of Shipping using Community Ports and Sailing in the Waters under the Jurisdiction of the Member States, of International Standards for Ship Safety, Pollution Prevention and Shipboard Living and Working Conditions (Port State Control) [2002] OJ L 19.

allowed to carry HGO within or from the EU.¹⁰⁴ A more ambitious regime was established by Directive 2009/16/EC¹⁰⁵ in the Erika III package, increasing pressure on high-risk ships, reforming the control mechanisms in port states to make them more efficient and creating a new collective target for Europe as a whole to check all ships, with more frequent inspections of high-risk ships.¹⁰⁶

These regulations improved the quality of port state control in the Member States of the EU by harmonising the standards and information exchange for port state controllers. They contribute to uniform practices in the region and eliminate potential EU ports of ‘convenience’. Furthermore, port state control in the EU applies equally to Member States acting as flag states to vessels sailing a foreign flag, while maintaining the competitiveness of the EU fleet.

As mentioned above, ports lie wholly within a state’s territory and therefore fall under its territorial sovereignty. It is generally agreed that a vessel’s right of access to ports is only a presumption, not an obligation, for port states. Therefore, measures to strengthen port state control could help minimise sovereignty disputes in the SCS area. Co-operative measures by involved parties could reduce issues of political sensitivity. However, the Tokyo MOU is not a legally binding instrument and is not intended to impose any legal obligation on any of the member states.¹⁰⁷ Although the secretariat of the Tokyo MOU declared the MOU a success, note that the inspection and detention rate of involved parties differs greatly between parties in the SCS area. This difference might provoke a ‘port shopping’ phenomenon, whereby vessels prefer to visit ports where the controls are more lax.¹⁰⁸

The socio-economic context of the Asia–Pacific region is very different from that of the European Union. The institutional framework of the EU is unique. In the foreseeable future, an Asian Union with strong institutions or normative power is unrealistic. Although the idea of creating a mandatory port state control system in the SCS sounds attractive, it will not succeed without an effective institutional mechanism, such as that seen in the European Union. Therefore, the Tokyo MOU, the only voluntary regime for port state control in the Asia–Pacific region, including the SCS, needs to be strengthened. As the best-performing port state in the SCS area, China can play a leading role to strengthen the regional port state control system. China has the experience and resources to sponsor the training of port state control officers in the SCS area.

¹⁰⁴ Regulation 1726/2003 Amending Regulation (EC) No 417/2002 on the Accelerated Phasing-In of Double-Hull or Equivalent Design Requirements for Single-Hull Oil Tankers [2003] OJ L 249/1, art 1(4)(b).

¹⁰⁵ Directive 2009/16/EC of the European Parliament and of the Council of 23 April 2009 on Port State Control [2009] OJ L 131/57.

¹⁰⁶ DG Maritime Transport, European Commission, *Summary of the Port State Control Directive of the Third Maritime Safety Package* (March 2009) <http://ec.europa.eu/transport/maritime/safety/doc/2009_03_11_package_3/fiche03_en.pdf>.

¹⁰⁷ *Memorandum of Understanding on Port State Control in the Asia–Pacific Region* (Tokyo MOU), Preamble.

¹⁰⁸ Tatjana Keselj ‘Port State Jurisdiction in Respect of Pollution from Ships: The 1982 United Nations Convention on the Law of the Sea and the Memoranda of Understanding’ (1999) 30 *Ocean Development and International Law* 148.

Moreover, as mentioned above, the detention rate of Chinese flagged vessels in the SCS area is on the white list published by the Tokyo MOU, which means Chinese vessels already behave well in the SCS area, a more stringent port state control system in the SCS will improve the quality of marine environmental protection by targeting vessels of Vietnam or Philippines without hampering the navigational right of Chinese vessels. This could maintain the competitiveness of the Chinese shipping industry. It is foreseeable that harmonised international standards would lead to improved port state control in the SCS, which may lead to better protection of the marine environment.

VI Conclusions

The prevention of vessel-source pollution is of particular importance for the SCS area. Shipping activities are a significant source of marine pollution in the SCS area. Due to the international nature of shipping, it is necessary for parties involved in SCS disputes to co-operate in order to prevent vessel-source pollution effectively. There are several legal options under international law.

The issue of sovereignty creates an obstacle for unilateral action. China, the biggest shipping and coastal state in the SCS area, is well equipped with domestic legislation addressing vessel-source pollution. China has also demonstrated political will to co-operate with other countries for the protection of the marine environment in the SCS. Specifically, China can promote a strengthened port state control system in the SCS area through the Tokyo MOU. Any such action would demonstrate China's willingness to co-operate and improve the prevention of vessel-source pollution without stirring up unsolved sovereignty disputes.