

The legality of a future EU Emission Trading Scheme for shipping

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List of abbreviations

ATA Air Transport Association of America

CBDR Common but differentiated responsibility
CDEM Construction, design, equipment, manning

CDM Clean Development Mechanism
CER Certified Emission Reduction

CO² Carbon dioxide

EC European Commission
ECJ European Court of Justice

EEDI Energy efficiency design index

EEZ Exclusive Economic Zone
ERU Emission Reduction Unit

EU European Union

EU ETS European Union emission trading scheme

GAIRS Generally agreed upon international rules and standards

GATT General Agreement on Tariffs and Trade

GHG Greenhouse gas

ICAO International Civil Aviation Organization

IMO International Maritime organization

JI Joint Implementation

KP Kyoto Protocol

LOSC United Nations Law of the Sea Convention

MARPOL International Convention for the Prevention of Pollution from Ships

MBM Market based measure

MEPC Marine Environment Protection Committee of the IMO

SEEMP Ship Energy Efficiency Management Plan

TFEU Treaty on the Functioning of the European Union

UN United Nations

UNFCCC United Nations Framework Convention on Climate Change

UNGA United Nations General Assembly

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Introduction

The European Union (EU) is planning to introduce an emission-trading scheme for the shipping industry to reduce the emission of greenhouse gasses (GHGs). In this thesis, the legality under international law of a shipping European Union emission trading scheme (EU ETS) will be assessed. In order to do so, the following two research questions will be answered:

- 1. Can the European Union unilaterally regulate greenhouse gas emissions from shipping?
- 2. To what extent is an EU ETS that covers voyages from non-EU vessels that take place beyond EU territory in conformity with international law?

The first question deals with whether it is at all allowed for the EU to take unilateral market based measures (MBM) for the regulation of GHG emissions from shipping. The second question concerns the actual unilateral measure that is currently proposed.

International shipping is a major contributor to the emission of greenhouse gasses worldwide. According to the International Maritime Organization (IMO), international shipping is estimated to have contributed about 2.7% to the global emissions of carbon dioxide (CO2) in 2007. For that same year, aviation contributed 2.1%. Emissions from shipping can be reduced through design- and operational changes.2

¹ IMO (2009) Second IMO GHG Study 2009, London: International Maritime Organization, p.136.

² IMO (2011a) Main events in IMO's work on limitation and reduction of greenhouse gas emissions from international shipping, London: International Maritime Organization, p. 46.

The United Nations Framework Convention on Climate Change (UNFCCC)³ and the Kyoto Protocol (KP)⁴ do not provide a regulatory framework for emissions from international shipping, but refer the matter to the IMO. Operational and design regulations have been adopted under the International Convention for the Prevention of Pollution from Ships (MARPOL).⁵ However, with the expected growth of the shipping industry in the near future, such regulations will not be enough to significantly reduce the contribution of shipping to global GHG emissions. The IMO is therefore currently⁶ working on the adoption of market-based measures to complement the new MARPOL chapter.⁷

The European Union (EU) has announced plans to take unilateral market-based measures to reduce greenhouse gas emissions from maritime transport through a shipping EU ETS, if no such action is agreed upon within the IMO.⁸ The EU has taken similar unilateral measures for the aviation industry. This has resulted in protests from several states, and has led to a case before the ECJ, Case C-366/10.⁹ An EU ETS for shipping can be expected to have similar characteristics as the aviation EU ETS and will give rise to similar legal questions. This thesis seeks to assess the legality of such a shipping EU ETS based on the two legal questions also posed in the aviation case before the ECJ. Other legal questions possibly arising from a shipping EU ETS are beyond the scope of this thesis.

Sources of international law mentioned in art. 38 of the Statute of the International Court of Justice¹⁰ are: international conventions in force between states, international custom and general principles of law. Judicial decisions and the teachings of the

³ 1992 United Nations Framework Convention on Climate Change, OS – 9 May 1992, EIF – 21 March 1994, 1771 UNTS 107.

⁴ 1997 Kyoto Protocol to the United Nations Framework Convention on Climate Change, OS – 11 December 1997, EIF – 16 February 2005, 37 ILM 22.

⁵ 1973 International Convention for the Prevention of Pollution from Ships, as Modified by the Protocol of 1978 Relating Thereto, October 1983, 1340 UNTS 62, *Basic Documents* No 21.

⁶ The last IMO's MEPC meeting on MBM for the shipping industry was 27 February – 2 March 2012. During the meeting it was agreed that further assessment of possible MBMs was necessary.

⁷ IMO 2011a, p.21-22.

⁸ Consultations on inclusion started on 19 January 2012; Faber et. al. (2009) Technical support for European action to reducing Greenhouse Gas Emissions from international maritime transport. Report commissioned by the European Commission, p.31; EC directive 2009/29/EC, 23 April 2009; European Commission (2012) 'Commission launches consultation to address greenhouse gas emissions from ships', web publication, 19 January 2012.

⁹ ECJ Case C-366/10 Air Transport Association of America, American Airlines Inc., Continental Airlines Inc., United Airlines Inc. v. UK Secretary of State for Energy and Climate Change 2011.

^{10 1945} Statute of the International Court of Justice, OS – 26 June 1945, EIF – 24 October 1945, 1 UNTS xvi.

most highly qualified publicists of the various nations are recognized as subsidiary sources.

The topic chosen for this thesis touches upon many legal regimes: the climate change regime, European Union law, aviation law and law of the sea. As this is a thesis for the purpose of finalizing a Master degree in International Law of the Sea, emphasis will be on law of the sea.

ECJ ruling C-366/10 will be discussed on several occasions. Due to the expected similarities between the existing aviation EU ETS and a future shipping EU ETS, the ECJ case and accompanying documents provide useful insight in the different legal positions that can be taken regarding a shipping EU ETS. Due to the position judicial decisions have as source of international law and due to the special character of the ECJ as supranational instead of inter-state court, the case is used as a possible line of arguing, and not as an authoritative decision on the matter.

The first chapter contains a brief description of the legal and institutional framework relevant to the EU ETS. The second chapter contains an assessment on the legality of unilateral measures by the EU. The third chapter will deal with the legality under international law of the proposed shipping EU ETS due to its extra-territorial aspects.

The legality of a future EU Emission Trading Scheme for shipping

1. Legal and institutional framework

Several legal questions could potentially arise from a shipping EU ETS. This thesis discusses two of those legal questions:

- 1. Can the EU unilaterally regulate GHG emissions from shipping?
- 2. To what extent is a EU ETS that covers (parts of) voyages from non-EU vessels that take place beyond EU territory, and enforcement of that ETS by port states in conformity with international law?

The first question is based on the power of states to regulate certain matters, possible limitations of that power by international law, most notably the climate change laws and the IMO and the obligation to cooperate, found in various treaties. The second question regards jurisdictional powers. This chapter will introduce the legal and institutional framework surrounding possible EU measures. The chapter is in no way meant to be comprehensive, but serves as a basic framework in which the legal analysis of the next chapters takes place.

1.1 The 1982 United Nations Law of the Sea Convention

The 1982 United Nations Convention on the Law of the Sea¹¹ regulates marine activities of states. It establishes a legal framework based on different maritime zones and flag, port and coastal state jurisdiction.

The LOSC obliges states to take measures to prevent, reduce and control pollution of the marine environment and using the best practical means at their disposal and in

¹¹ 1982 United Nations Convention on the Law of the Sea, OS – 10 December 1982, EIF – 16 November 1994, 1833 UNTS 397, *Basic Documents* No 36.

accordance with their capabilities.¹² States have a duty to cooperate, incorporated into several LOSC provisions.¹³

The extent to which a state can exercise jurisdiction is subject to the LOSC and other rules of international law and differs per maritime zone. A state has full sovereignty over its internal waters. Part of the internal waters of a state are a state's ports. Sovereignty of a state over its ports is recognized as a rule of customary international law and is confirmed in several provisions of the LOSC.

A coastal state can exercise (limited) jurisdiction over its territorial sea and Exclusive Economic Zone and thus is allowed to prescribe and enforce certain rules relating to foreign vessels.¹⁷

The high seas are described as 'all parts of the seas that are not included in the EEZ, in the territorial sea or in the internal waters of a State, or in the archipelagic waters of an Archipelagic State'. The high seas are characterized by an open-access regime that gives all states the right to freely navigate, fish or conduct other activities. Vessels on the high seas are subject to the exclusive jurisdiction of the flag state. ²⁰

A coastal state has generally no jurisdiction over foreign flagged vessels. However, exclusive flag state jurisdiction is not an absolute rule. Derogation is permitted if there is an exception expressly provided for in international treaties or in the LOSC itself.²¹

The LOSC does not deal directly with climate change and does not mention greenhouse gasses. This is related to the fact that the convention was adopted in 1982, before climate change mitigation efforts were well on their way. Some might argue that a marine convention is not suitable for dealing with the regulation of greenhouse gas emission. However, vessel source GHG emissions qualify as marine

¹² Art. 194 LOSC.

¹³ Art. 197 LOSC contains the general duty to cooperate.

¹⁴ Rothwell, D., Stephens, T. (2010) *The International Law of the Sea*, Oxford: Hart Publishing, p.22; Molenaar, E.J. (2007) 'Port State Jurisdiction: Toward Comprehensive, Mandatory and Global Coverage', *Ocean Development & International Law*, Volume 38, Issue 1-2, p. 228.

¹⁵ Art. 11 LOSC

¹⁶ Case concerning Military and Paramilitary Activities In and Against Nicaragua (Nicaragua v. United States of America), [1986] *I.C.J. Rep.*, para. 123, p. 111; art. 25(2), 211(3) LOSC.

¹⁷ Art. 2, 19, 56 LOSC.

¹⁸ Art. 86 LOSC.

¹⁹ Art. 89 LOSC; Rothwell & Stephens 2010, p. 145.

²⁰ Art. 92-94 LOSC; Reuland, C.F. (1989) 'Interference with Non-National Ships on the High Seas: Peacetime Exceptions to the Exclusivity Rule of Flag-State Jurisdiction'. Vanderbilt Journal of Transnational Law, vol.22, p. 1164; Guilfoyle, D. (2009) *Shipping interdiction and the Law of the Sea*, Cambridge: Cambridge University Press, p. 16; Rothwell & Stephens 2010, p. 159.

²¹ Art. 92(1), 110 LOSC; Churchill, R.R. & Lowe, A.V. (1999) *The Law of the Sea*, Manchester: Manchester University Press, p. 68.

pollution as it is the "indirect introduction 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."²² Greenhouse gas emission fall under this definition, as climate change brought about by increased emissions of greenhouse gasses into the atmosphere can have grave effects on the world's oceans, due to its warming effects and consequent melting of the poles, sea level rise, rise of oceans temperature and changing salinity and acidity levels.²³

Regulation of GHG emission from shipping falls under art. 212 and 222 LOSC: pollution from or through the atmosphere. Art. 212 obliges state parties to adopt laws and regulations to prevent, reduce and control pollution of the marine environment from or through the atmosphere applicable to the air space under their sovereignty and to vessels flying their flag. Moreover, state parties, "acting especially through competent international organizations or diplomatic conference, shall endeavour to establish global and regional rules, standards and recommended practices and procedures to prevent, reduce and control such pollution."²⁴

It is argued by Molenaar that art. 212 and 222 LOSC are *lex specialis*, ²⁵ and therefore have primacy over the more general provisions on vessel source pollution in the LOSC. This means that art. 212 and 222 introduce a different regime for pollution through the atmosphere and that the provisions on vessel source pollution are not applicable. An EU ETS regulating air pollution from shipping is therefore governed by art. 212 and 222 LOSC. Art. 212 and 222 differ substantially from the vessel source pollution regime. States are only obliged to *take into account* internationally agreed rules, standards and recommended practices and procedures, while generally accepted international rules and standards (GAIRS) play an important role for vessel source pollution and are used as mandatory minimum or maximum level of regulations. Art. 212 mention port state jurisdiction, thus leaving the port state jurisdiction, as found in general law and reflected in art. 25(2) and 211(3),

²² Art. 1(1)(4) LOSC.

²³ Tegart, W.J. & Sheldon, G.W (eds.)(1992) Climate Change 1992: The Supplementary Report to the IPCC Impacts Assessment, Canberra: Australian Government Publishing Service, p.6; Climate change and its causeeffect relationship is beyond the scope of this thesis.

²⁴ Art. 212(1 and 3) LOSC.
²⁵ Molenaar, E.J. (1998) *Coastal State Jurisdiction over Vessel-Source Pollution*, The Hague: Kluwer Law International, p. 503.

p. 502-504, 507; According to Molenaar, lex generalis would be art. 211(1)(2)(4)(5)(6), 218, 56(1)(b)(iii), 220, 233, but not 21, 25(2) and 211(3) LOSC.

applicable. Art. 218, that gives the coastal state jurisdiction over offences occurring beyond its maritime zones is not applicable as it relates only to discharges. ²⁶

Art. 220 lays down gradual enforcement jurisdiction for vessel-source pollution according to the (threatened) damage. This gradual enforcement approach is missing for art. 222, thus seemingly leaving the coastal state wide discretion for enforcement.²⁷

Art. 211, 218 and 220 LOSC are largely inapplicable to vessel source air pollution.²⁸ With the entry into force of Annex VI to MARPOL in 2005, ²⁹ this has been changed for the air pollution regulations contained in Annex VI, making the vessel source pollution provisions applicable to the enforcement of the MARPOL regulations concerning air pollution for state parties. 30 The MARPOL amendment will be discussed below. Because MBM are not yet included in MARPOL VI, Art. 212 and 222 remain the relevant provisions for such regulations.

The Law of the Sea is no stand-alone branch of international law. In the preamble of the LOSC, it is recognized that "matters not regulated by this Convention continue to be governed by the rules and principles of general international law". A state's jurisdictional rights are therefore also governed by principles of general international law. Several jurisdictional principles exist, such as territoriality principle, nationality principle, and several principles that potentially could be the basis for assertion of extra-territorial jurisdiction.³¹

1.2 Climate Change

In 1992, the United Nations Framework Convention on Climate Change (UNFCCC) was adopted. This global convention establishes a legal framework in which efforts for GHG emission reduction take place. The Kyoto Protocol (KP) to the UNFCCC

²⁶ Molenaar 1998, p.503-505.

²⁷ Molenaar 1998 p.503-505.

²⁸ Molenaar 1998, p. 503.

²⁹ 1997 Protocol to amend the International Convention for the Prevention of Pollution from Ships, 1973, as

modified by the Protocol thereto, entered into force 19 May 2005.

MARPOL regulation VI/11(6); Molenaar, E.J. (2006) 'Additional enforcement actions', in: CE Delft (2006) Greenhouse Gas Emissions for Shipping and Implementation: Guidance for the Marine Fuel Sulphur Directive, Delft: CE Delft, Appendix 3, p.70.

³¹ Jennings, R., Watts, A. (eds.) (1992) *Oppenheim's International Law*, 9th Edition, Volume I, Harlow: Longman, p. 457-498.

lays down more precise obligations for developed states.³² The protocol covers commitments for the period 2008-2012.³³ Overall goal is to reduce their GHG emissions by at least 5% below 1990 levels before 2012.³⁴ Parties to the KP are 37 developed countries and the EU. The Kyoto Protocol identifies several measures parties could take to reach the binding targets. One of such measures is emission trading.³⁵

The current climate change regime does not refer to art. 212 and 222 of the LOSC and does not set targets for the reduction of GHG emissions from shipping. According to art. 2(2) KP, further regulations for shipping shall be pursued working through the IMO.

1.3 Regulation of GHG emission by the IMO

The IMO has pursued regulation of GHG emissions through amending the existing convention on marine pollution, the MARPOL Annex VI MARPOL deals with prevention of air pollution from ships and was recently amended to include measures for the reduction of GHG emissions from shipping.³⁶ These are:

- Energy Efficiency Design Index (EEDI) for new vessels; new ships will have to meet a certain minimum energy efficiency level in order to acquire an Energy Efficiency Certificate, leading to reduced CO² emissions.³⁷
- Ship Energy Efficiency Management Plan (SEEMP) for existing vessels that will stimulate ship owners to improve the energy efficiency of their vessel.³⁸

With the expected growth of the shipping sector, reductions made through the implementation of EEDI and SEEMP are not enough to significantly reduce the contribution of shipping to GHG emissions.³⁹ The IMO is therefore working on the

³⁹ IMO 2011a, p.21-22.

³² Birnie, p., Boyle, A., Redgwell, C. (2009) *International law and the Environment*, Oxford: Oxford University Press, p. 361.

³³ Art. 3(1) Kyoto Protocol.

³⁴ Art. 3(1) Kyoto Protocol.

³⁵ Art. 17 Kyoto Protocol.

³⁶ Adopted in 2011 in Chapter 4 to Annex VI; IMO 2011a, p.4.

³⁷ MARPOL VI/21(1)

³⁸ IMO (2011c) Assessment of IMO mandated Energy Efficiency Measures for International Shipping, MEPC 63/INF.2 Annex, London: International Maritime Organization, p. 3, 35.

adoption of market-based mechanisms (MBMs) to complement the new MARPOL chapter. 40

1.4 The EU

1.4.1 Institutional structure of the European Union

The European Union is a supra-national organization. It has powers that are conferred upon it by its member states, ⁴¹ and is recognized to have international legal personality. ⁴² One of the objectives of the EU, set out in art. 3.3 TFEU, ⁴³ is to work for a high level of protection and improvement of the quality of the environment. Most European regulations are laid down in directives.

Due to its international legal personality, the EU can conclude international agreements that become binding upon it and its member states. Such international agreements become an integral part of EC law. ⁴⁴ This means that directives that are inconsistent with international law can be challenged, as the international agreements give certain rights and obligations to the EU. Moreover, violations of obligations of the EU and its member states may be brought before international tribunals. ⁴⁵

The European Court of Justice is the central European institution for judicial review of community legislation. The ECJ sees itself as the final and exclusive authority on the interpretation of EU laws. However, the ECJ is a supra-national court, not an international court. It can interpret international agreements for as far these have become an integral part of EC law⁴⁷, between private parties and the EU/EU member state, and between EU member states. It has no competence to judge upon a case

⁴⁰ The last IMO's MEPC meeting on MBM for the shipping industry was 27 February – 2 March 2012. There it was agreed that further assessment of possible MBMs was necessary; IMO (2012) Marine Environment Protection Committee (MEPC), 63rd session, 27 February to 2 March, IMO Webpage.

⁴¹ Fairhurst, J. (2009) Law of the European Union, Essex: Pearson Education Limited, p.10; Frank, V. (2007) The European Community and Marine Environmental Protection in the International Law of the Sea, Leiden: Martinus Njihoff, p.56.

⁴²Art. 47 2010 Treaty on the European Union, Official Journal of the European Union C83/13, 30 March 2010; Ward, I. (2003) *A critical introduction to European Law*, London: Reed Elsevier, p.217; Frank, 2007, p. 61-62. ⁴³ 2008 Treaty on the Functioning of the European Union, 9 May 2008, Official Journal of the European Union C 115/49

⁴⁴ Art. 216 TFEU; Fairhurst 2009, p.33; Frank 2007, p. 61.

⁴⁵ Bethlehem, D. 'International law, community law, national law: three systems in search of a framework', In: Koskenniemi, M. (eds.) (1998) *International law aspects of the European Union*, Den Haag: Martinus Nijhoff Publishers, p. 184; Frank 2007, p.61.

⁴⁶ Art. 259 TFEU; European Union (-) 'Court of Justice of the European Union', EU Webpage; Ward 2003, p. 71. ⁴⁷ Art. 267 TFEU.

between an EU member state and a Non-EU member state, and is therefore more equal to a domestic court than to an inter-state international court. 48

1.4.2 The EU and reduction of GHG emissions

The EU has been a frontrunner in environmental and climate change policy and has introduced a GHG emission trading system for its member states. 49 The EU introduced an emissions trading scheme for some of its industries in 2005 through Directive 2003/87/EC. The EU ETS is a 'cap-and-trade' system, requiring member states to impose binding caps on emissions from various installations and activities and allocate carbon credits to its industries. Companies that exceed their allowance can purchase excess credits from others. Excess emission that is not covered by purchased credits is fined. 50 In this way, an economic incentive is given to industries to reduce their emissions.⁵¹

The EU has pursued the reduction of GHG emissions from aviation and shipping for several years.⁵² From 2012 onwards, the EU has included the aviation industry in the EU ETS.⁵³ All airliners are obliged to seek allowance for GHG emissions of flights departing from or destined for EU airports.⁵⁴ Airliners will have to acquire carbon credits for their entire journey to or from the EU, even if that journey partly takes place above the high seas or the territory of non-EU states. The EU decided for this wide scope of application of its ETS for aviation to avoid carbon leakage and competitiveness issues that would otherwise arise.⁵⁵

The EU has announced plans to also take unilateral action to reduce greenhouse gas emissions from shipping, if no such action is agreed upon in the IMO.⁵⁶ Directive 2009/29/EC requires the EC to consider inclusion of the shipping industry in the EU ETS system if negotiations within the IMO have not produced international agreement by 2012.⁵⁷ The EC started consultations on such inclusion on 19 January

⁴⁸ Art. 267-275 TFEU.

⁴⁹ Directive 2003/87/EC; Directive 2009/29/EC.

⁵⁰ Directive 2003/87/EC recital 7,11,12.

⁵¹ Weishaar, S. (2009) Towards Auctioning: The Transformation of the European Greenhouse Gas Emission Trading System, Alphen aan de Rijn: Wolters Kluwer, p. 6.

⁵² European Commission (-) 'Reducing emissions from the shipping sector', EC Webpage.

⁵³ Directive 2008/101/EC. 54 Directive 2008/101/EC, recital 16.

⁵⁵ Directive 2008/101/EC, art.3e, 3f, Annex VI.

⁵⁶ CE Delft (2009) Technical support for European action to reducing Greenhouse Gas Emissions from international maritime transport. Report commissioned by the European Commission, p.31.

⁵⁷ Directive 2009/29/EC, recital 3.

2012.⁵⁸ While the final characteristics of an EU ETS for shipping have not been decided upon, based on various studies done by the EC and a comparison with the ETS for the aviation industry, a prognosis can be made on what a shipping EU ETS will look like. A cap-and-trade system similar to the existing EU ETS is the most likely option.⁵⁹ The scheme will be applicable to all vessels that voluntarily enter and exit EU ports and port state jurisdiction will be used for enforcement of the scheme. Similar to the aviation EU ETS, for the shipping EU ETS to cover sufficient quantities of GHG emissions, emissions that occur beyond the territorial waters of EU states will have to be included.⁶⁰

The legality of EU directive 2008/101 that included aviation into the EU ETS was challenged before the ECJ. The main points brought forward by the claimants were the legality of the scope of the EU ETS, including the entire journey, and legality of unilateral measures by the EU. The ECJ passed judgment in 2011, declaring that the Directive was not in contravention of the legal rules brought forward by the claimant ⁶¹

1.5 Chapter recap

The law of the sea is the main legal framework for regulation of shipping. Art. 212 and 222 LOSC set out rights and obligations regarding the regulation of air pollution. Climate change is dealt with through the UNFCCC and KP agreements. The Kyoto Protocol refers the regulation of GHG emissions from shipping to the IMO. Some progress in the IMO has been made on the matter, with the adoption of the SEEMP and EEDI measures in MARPOL. Progress in the IMO on market-based measures has been slow. The EU is planning to take unilateral MBM for the reduction of GHG emissions from shipping. Unilateral measures have to be in accordance with international law.

⁵⁸ European Commission (2012) 'Commission launches consultation to address greenhouse gas emissions from ships', web publication 19 January 2012.

⁵⁹ ČE Delft 2009, p. 163-168; Ringbom, H. (2011) 'Global Problem—Regional Solution? International Law Reflections on an EU CO² Emissions Trading Scheme for Ships', *International Journal of Marine and Coastal Law*, vol. 26, pp.613–641, p.619; ICTSD (2011) *International Transport, Climate Change and Trade: What are the Options for Regulating Emissions from Aviation and Shipping?* Geneva: International Centre for Trade and Sustainable Development, p.8.

⁶⁰ CE Delft 2009, p. 163-168; Ringbom 2011 p.619; Miola, A. et. al. (2010) 'Regulating Air Emissions from Ships—"State of the Art on Methodologies, Technologies and Policy Options', *Report by the European Commission*, Joint Research Centre, Institute for Environment and Sustainability, p. 41-42.
⁶¹ ECJ C-366/10, para. 45, 157.

2. Legality of unilateral EU measures for the reduction of GHG emissions

Climate change, and the emission of GHGs are global environmental problems; collective action problems that require states to work together to find solutions on a global scale. The EU, by seeking to include shipping into the EU ETS is, as a supranational organization, taking unilateral action to deal with a collective action problem. In this chapter, it is assessed whether the EU can legally take unilateral measures for the reduction of GHG emissions from international shipping.

While it is generally recognized that cooperation is necessary to deal with collective action problems, taking unilateral measures is not necessarily illegal. Taking such measures is only illegal if the capacity of states to act unilaterally is limited by international law or if unilateral measures violate the rights of other states.⁶²

The international legal framework discussed in the previous chapter contains several principles and provisions that might limit the EUs capacity to unilaterally regulate GHG emission from international shipping. Central is the duty to cooperate, found in general international law and various provisions of relevant conventions. International legal obstacles to unilateral regulation by the EU could be:

- The duty to pursue limitation of emission through the IMO found in art. 2.2 KP.
- The duty to cooperate found in the LOSC, in art. 194, 197 and 212.
- The rules on maximum standards through the GAIRS-formula as found in the LOSC.

⁶² Dupuy P.M. (2000) 'The place and Role of Unilateralism in Contemporary International Law', *European Journal of International Law*, vol 11:1, p. 24.

These obstacles are related to the general duty to cooperate as found in international law. Each will be discussed, after first having discussed the scope of the general duty to cooperate in international law.

2.1 The duty to cooperate in general international law

The foundation of our current international legal system is state sovereignty: independent states have supreme power to rule over their territory. Without an overarching authority, states are the highest entities and are generally capable of taking unilateral actions.⁶³ Cooperation, through international hard and soft law and other cooperative arrangements, is necessary to successfully govern transboundary issues and to establish basic rules to govern inter-state relations.

Consequently, a duty to cooperate based on the concepts of good faith and good neighborliness has developed in international law as the basic premise for relations between states. ⁶⁴ Treaties, conventions and international resolutions contain references to the duty to cooperate and the duty is now recognized as a principle of customary law. ⁶⁵

2.1.1 Cooperation and unilateral action

State sovereignty remains the basic rule and states are only bound by free choice through consent. However, unilateral action is conditioned by the obligation to cooperate. The duty to cooperate reflects a balance between the right of free choice of states to take unilateral action and the need to establish basic behavioral rules for cooperation. 68

The duty to cooperate has been given shape through the establishment of procedural requirements between states that have been adopted into several treaties. Such procedural requirements relate to information sharing, consultation, notification and

68 Bodansky 2000, p. 346-347.

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⁶³ Bodansky D. (2000) 'What's so Bad about Unilateral Action to Protect the Environment?' *European Journal of International Law*, Vol. 11:2, p. 345.

⁶⁴ Sands, P, et al. (2003) *Principles of International Environmental Law*, Cambridge: Cambridge University Press, p.203; art. 1 en 74 1945 Charter of the United Nations, OS – 26 June 1945, EIF – 24 October 1945, 1 LINTS xvi

⁶⁵ See for example UNGA resolution 25/2625 (October 24, 1970): "All states have the duty to cooperate with one another . . . to maintain international peace and security and to promote international economic stability and progress . . ."; Peters, A. (2003) 'International Dispute Settlement: a network of cooperational duties', *European Journal of International Environmental Law*, vol. 14:1, p. 3.

⁶⁶ Art. 6 and 34 Vienna Convention on the Law of treaties; Peters p. 10.

⁶⁷ Dupuy 2000 p. 23.

negotiation, the conclusion of environmental impact assessments and center around the obligation to conduct negotiations in good faith.⁶⁹

2.1.2 Case law on cooperation in good faith

The duty to cooperate has been further interpreted by international courts and arbitration in relation to dispute settlement and cooperation with regards to environmental issues. Some general rules can be deducted.

Case law makes clear that while the obligation to cooperate is an obligation of process, just fulfilling the procedural requirements is not sufficient. The procedural requirements need to be fulfilled in good faith. In the Nuclear test case, the ICJ decided: "One of the basic principles governing the creation and performance of legal obligations, whatever their source, is the principle of good faith. Trust and confidence are inherent in international cooperation, in particular in an age when this cooperation in many fields is becoming increasingly essential"⁷⁰

In the North Sea Continental Shelf cases, the ICJ has decided on negotiating in good faith:

"the parties are under an obligation to enter into negotiations with a view to arriving at an agreement, and not merely to go through a formal process of negotiation [. . .]; they are under an obligation so to conduct themselves that the negotiations are meaningful, which will not be the case when either of them insists upon its own position without contemplating any modification of it". ⁷¹

What exactly meaningful is, is left to the parties and will have to be judged upon on a case-by-case basis. In any case, it will entail a sincere effort of the parties, continued negotiations over time, and the exploration of all options available. A state cannot act in a way that frustrates the outcome of the negotiations or abandon negotiations prematurely.⁷²

However, the obligation to cooperate remains an obligation of process or conduct and not one of result. There is no obligation to reach agreement. *Railway Traffic between Lithuania and Poland:* "Where the parties are under an obligation to negotiate [...], they are under an obligation 'not only to enter into negotiations, but

⁷² Peters 2003, p. 15-16.

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⁶⁹ Sands 2003, p.204; Barnes, R.A. (2012) 'Consolidating Governance Principles for Areas beyond national jurisdiction', *The International Journal of Marine and Coastal Law*, vol. 17, p. 277.

⁷⁰ ICJ, Nuclear Tests Case (Australia v. France), ICJ Reports (1974) 253, at 268, para. 46.

⁷¹ ICJ, North Sea Continental Shelf Cases, ICJ Reports (1969) para. 85.

also to pursue them as far as possible with a view to concluding agreements [...]. But an obligation to negotiate does not imply an obligation to reach an agreement."⁷³ Cooperation should be pursued as far as possible, but the obligation does not exist indefinitely. In the Bluefin Tuna case, the ITLOS concluded: "In the view of the Tribunal, [the negotiation clause] does not require the Parties to negotiate indefinitely while denying a Party the option of concluding, for purposes of both Articles 281(1) and 283 that no settlement has been reached. To read [the negotiation clause] otherwise would be unreasonable."⁷⁴ When exactly cooperation has been pursued sufficiently is left open and again will have to be judged upon on a case-bycase basis based on reasonableness.⁷⁵

Case law makes clear that the duty to cooperate is an essential obligation of international law. It is important to recognize that the different cooperation provisions all have different wording, indicating differing scopes of specific duties to cooperate. 76 The duty to cooperate will also extend to international organizations such as the EU.⁷⁷ General criteria for complying with the duty to cooperating are:

- Fulfilling of procedural requirements such as sharing of information, consultation, notification and negotiation and the conclusion of environmental impact assessments in good faith;
- parties are under an obligation to enter into negotiations with a view to arriving at an agreement;
- Negotiations have to be meaningful;
- Sincere effort of the parties, continued negotiations over time, and exploration of all options available. A state cannot act in a way that frustrates the outcome of the negotiations or abandon negotiations prematurely;
- There is generally no obligation to reach agreement.

In order to find out whether the EU can legally take unilateral action for the reduction of GHG emissions from international shipping, specific provisions in international agreements relevant to a shipping EU ETS that contain a duty to

⁷³ PCIJ, Railway Traffic between Lithuania and Poland, PCIJ Ser. A/B, no. 42 (1931), p. 116.

⁷⁴ Southern Bluefin Tuna Cases, the tribunal's award on jurisdiction and admissibility of 4 August 2000, 39 ILM (2000), para. 55, p.1389.

Dupuy 2000 p. 25.

⁷⁶ Henriksen, T, Hoel, H (2011) 'Determining Allocation: From Paper to Practice in the Distribution of Fishing Rights Between Countries', Ocean Development & International Law, vol 42:1-2, pp. 66-93, p. 68. ⁷⁷ Barnes 2012, p. 279.

cooperate need to be assessed and interpreted in the light of the requirements set out in the case law on the general duty to cooperate.

2.2 Cooperation through the IMO

The UNFCCC and Kyoto Protocol contain the international framework for climate change regulations and contain the main cooperation clause for regulation of GHG emissions from shipping. The EU and its member states are parties to both the UNFCCC and the Kyoto Protocol, and thus are bound by the obligations contained in them.

The aviation and shipping industries are not included in the binding targets given by the Kyoto Protocol.⁷⁸ Instead, art. 2.2 KP decides:

"The Parties included in Annex I shall pursue limitation or reduction of emissions of greenhouse gases not controlled by the Montreal Protocol from aviation and marine bunker fuels, working through the International Civil Aviation Organization and the International Maritime Organization, respectively."

This provision, while not directly referring to cooperation, effectively contains an obligation to cooperate for regulation of GHG emissions from shipping and specifies the forum in which the negotiations on regulations have to take place. The EU is not a member to the IMO. This is a potentially complicating factor and is further discussed below. While the KP period ends after 2012, the KP does not necessarily loses its relevance at that time. It is only the quantified emission limitation or reduction commitments that are tied to the period of 2008-2012. The general commitments of the KP, such as the institutions created by it, and art. 2.2 KP, and will continue to be binding.⁷⁹

2.2.1 Art 2.2 KP limiting unilateral action

The text of art. 2.2 states that Annex I parties shall pursue GHG reductions working through the IMO. The EU, by seeking to include shipping into the EU ETS, goes outside the IMO for the regulation of GHG emissions for shipping. It has been argued that art. 2.2 KP permanently limits the capacity of parties, and thus the EU

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⁷⁸ IMO 2011a, p.27.

⁷⁹ UNFCCC Secretariat (2010) 'Legal considerations relating to a possible gap between the first and subsequent commitment periods: Consideration of further commitments for Annex I Parties under the Kyoto Protocol', FCCC/KP/AWG/2010/10, p. 9.

and its member states, to take unilateral action. The Air Transportation Association of America (ATA) in the ECJ Case C-366/10 argues that:

"[art. 2.2 KP] reflects the consistently stated position in international law that unilateral action to deal with environmental problems outside the jurisdiction of a State must be avoided and environmental measures addressing transboundary or global environmental problems must be achieved through international consensus."

In support of the argument is referred to the wording and the drafting history of art. 2.2 KP. The drafting history of art. 2.2 indicates that the provision has an mandatory character. The provision was moved from an optional list to a stand-alone provision and 'shall pursue' was used, indicating the existence of an obligation to work through the IMO. Moreover, the original text spoke of cooperation *with* the ICAO and IMO. This was changed to "through the ICAO and IMO." This could indicate a more substantial role for the IMO, as primary forum for regulation.

This argumentation is not convincing. It is important to recognize that a duty to cooperate does not necessarily exclude unilateral action, but makes unilateral regulations conditional, as was discussed in the previous paragraph. While the importance of cooperation to address global environmental problems is generally recognized, as is argued by ATA, there is no rule saying that measures *must* be achieved through international consensus thus completely excluding unilateral action. The duty to cooperate found in general international law does not extend that far. The obligation to cooperate is an obligation of conduct. A state can therefore fulfill its obligation to cooperate while no agreement is reached. A state will then be able to address environmental problems unilaterally. In ECJ C-366/10, Advocate-General Kokott in her Opinion uses such a line of arguing:

"Article 2(2) of the Kyoto Protocol gives expression to the Contracting Parties' preference that a multilateral solution to the limitation or reduction of greenhouse gases from aviation be found by working through the ICAO. [...] However, the Contracting Parties' preference for a multilateral solution within the framework of the ICAO is only translated by Article 2(2) of the Kyoto Protocol into a very general obligation of conduct. If no agreement is reached within the framework of the ICAO within a reasonable period the Parties to the Kyoto Protocol must be at liberty to take the measures necessary to achieve the Kyoto objectives at national

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⁸⁰ ECJ C-366/10, Observations of the Claimant, p. 45.

⁸¹ Depledge, J. (2000) Tracing the Origins of the Kyoto Protocol: an Article-by-Article textual history, UN Doc. FCCC/TP/2000/2, p.27.

or regional level, otherwise there would be a serious risk that those objectives might not be achieved."82

This means that art. 2.2 does not necessarily limit unilateral regulation, but obliges states to try reach agreement through the IMO. If an effort in good faith is made, this obligation is fulfilled and unilateral action is open to states.

In order for the EU to lawfully take unilateral MBM measures, it needs to have fulfilled the criteria of the duty to cooperate under art. 2.2 KP that were mentioned in para. 2.1.

2.2.2 The EU and its observer status in the IMO

Assessment of fulfilment of the cooperation criteria by the EU is complicated by the fact that the EU is not a member to the IMO. The IMO does not allow full membership for international organizations, but gives the possibility for international organizations to become an observer. ⁸³ The European Commission has observer status. The EC, representing the EU, receives all important IMO documents and may attend all IMO meetings. However, observer status does not allow the EC to negotiate directly, to vote, or to speak on behalf of all EU states. ⁸⁴

The EU, while being bound by the Kyoto Protocol, therefore cannot not participate in the same way as states in negotiations. The question then arises whether the EU is bound by an obligation it cannot fulfill.

This question can be answered in several ways. It could be argued that, as the EU has consented to be bound by a cooperation obligation with as a forum the IMO, it has forfeited its right to take unilateral action. Being no member to the IMO it cannot participate in the negotiations and thus has to leave regulation to IMO and its member states. Another line of arguing is that the EU is not bound by art. 2.2 KP as it has no real opportunity to fulfill this obligation. The EU is then free to undertake unilateral action for the reduction of GHG emissions from shipping. Its member states, however, are bound by the obligation to cooperate within the IMO. A third

52 at 184.

83 Art. 4 1948 Convention on the International Maritime Organization, OS – 6 March 1948, EIF – 17 March 1958, 289 UNTS 3, *Basic Documents* No 8.

⁸⁴ European Commission (2002) 'Recommendation from the Commission to the Council: in order to authorize the Commission to open and conduct negotiations with the International Maritime Organization on the conditions and arrangements for accession by the European Community', Brussels, 09.04.2002 SEC(2002)381 final, p. 36-37.

⁸² Case C-366/10, Opinion of Advocate General Kokott, The Air Transport Association of America and Others, p. 52 at 184.

option, that seems most reasonable, is that the EU has consented to art. 2.2 KP and is thus bound by it. It can fulfill its obligation to cooperate through its observer status at the IMO and through its influence on its member states. Interestingly, arguments touching upon this issue have not been thoroughly explored in literature and are not mentioned by the parties involved in ECJ C-366/10 or by Advocate-General Kokott. The conclusion that the EU is also bound by art. 2.2 KP is supported by the fact that in practice, mechanisms have been developed that enable the EU to participate reasonably effective in the IMO. The "Procedural framework for the adoption of Community or common positions for IMO related issues and rules governing their expression in the IMO" gives procedural rules for coordinated responses by EC and member states within the IMO where the EU has sole competence or shared competence to regulate a matter. The reduction of GHG emissions falls under the sole competence of the EU. 85 This means that a Community position, after adoption in the Council, is submitted in writing to the IMO and is voiced in IMO meetings by the EC as observer, by a member state speaking on behalf of the EC, or by both. 86 The fact that the EU is able to participate in the IMO and is able to communicate joint positions and coordinate the responses of its member states in the IMO can lead to the conclusion that art. 2.2 KP is binding upon it.

2.2.3 EU efforts in the IMO

In order for the EU to comply with art. 2.2 KP it needs to fulfill the general criteria of the duty to cooperate as found in general international law and the specific criteria laid down in art. 2.2 KP: to pursue limitation of GHG emissions through the IMO, to enter into meaningful negotiations with a view to arriving at an agreement.

Negotiations on CO² reductions in the IMO started in 1997 and the EU has continuously participated. The European Union released its strategy to reduce atmospheric emissions from seagoing ships in 2002 and emphasized that "to achieve effective global reductions in atmospheric emissions the EU and its Member States need to work closely with key shipping nations at the International Maritime

⁸⁵ The EU has compentence to regulate environmental matters and has sole compentence regarding climate change, art. 2, 3.1, 3.3 TFEU; EU (1998);

The European Community's Instrument of Formal Confirmation, 1 April 1998, United Nations Treaty Se ries, p. 231; See for an extensive argumentation on the competences of the EU on this matter ClientEarth (2011) *Legal implications of EU action on GHG Emissions from the International Maritime Sector*, Brussels: ClientEarth, p.3-4.

⁸⁶ Such as the principle of sincere cooperation, art. 4(3) Treaty of the European Union and ECJ Case C-45/07 Commission of the European Communities v Hellenic Republic 12 February 2009.

Organization" and "International action through the IMO is the best way to regulate the environmental performance of ships of all flags." 87 Now, 15 years later, negotiations are ongoing with no prospect of agreement on MBM in the near future. 88 The EU has made significant steps to implement and facilitate the implementation by its member states, of measures that have been agreed upon within the IMO. 89 The EU has always made clear that EU MBM measures are to be aligned as far as practicable with international standards and instruments and EU ETS plans include suggestions for incorporation of the EU ETS into a global scheme, may agreement be reached on the international level. 90 The EU continues to be involved in the IMO process and the unilateral measures do not frustrate reaching agreement. Based on the EU efforts made thus far, it can be concluded that the EU has negotiated in good faith in a meaningful way. The EU cannot reasonably be expected to wait indefinitely, certainly considering the detrimental effects that a continued impasse and inaction in the area of climate change can have on the global environment. It was concluded earlier that the duty to cooperate is an obligation of conduct and not an obligation to reach agreement. The EU has fulfilled its obligation of conduct and has respected art. 2.2 KP.

2.3 Obligation to cooperate under LOSC

The LOSC contains references to cooperation relevant to regulation of GHG emissions from shipping in art. 194, 197 and 212. These provisions could potentially impose conditions on unilateral EU measures.

General obligations to cooperate can be found in art. 194 and 197 LOSC. Art. 194 obliges states to individually or jointly take measures to prevent, reduce, and control pollution of the marine environment from any source. The provision explicitly recognizes the possibility for states to unilaterally take measures and only obliges to cooperate where appropriate. No limitation to the EUs capacity to unilaterally regulate GHG emissions from shipping can be derived from this provision.

⁸⁷ EC (2002b) Communication from the Commission to the European Parliament and the Council - A European Union strategy to reduce atmospheric emissions from seagoing ships COM/2002/0595 final Volume I.

⁸⁸ See for the involvement of the EC and EU member states minutes of MEPC meetings, for example minutes of the different MEPC meetings, such as MEPC 63/23 and 62/24, http://www.uscg.mil/imo/mepc/docs/htm.

⁸⁹ EC (-b) Emissions from Maritime Transport, European Commission Website.

⁹⁰ EC (-c) Roadmap: Measures to include maritime transport emissions in the EU's greenhouse gas reduction commitment if no international rules agreed, web publication; European Commission (2012) 'Commission launches consultation to address greenhouse gas emissions from ships', web publication 19 January 2012.

Art. 197 is the central cooperation provision of the LOSC. States are obliged to

"cooperate on a global basis and, as appropriate, on a regional basis, directly or through competent international organizations, in formulating and elaborating international rules, standards and recommended practices and procedures consistent with this Convention, for the protection and preservation of the marine environment, taking into account characteristic regional features." ⁹¹

This provision contains a broad obligation to cooperate. The good faith principles as set out in para. 2.1 will be relevant for the fulfillment of the obligation. It is beyond the scope of this thesis to describe all EU cooperative efforts for the protection of the marine environment.

It is important to note that art. 197 speaks of cooperation in multiple forums. It obliges states to cooperate on a global, regional basis and bilateral basis. The EU itself is a regional cooperative arrangement. For global issues such as climate change, global instruments will be most appropriate.

Due to the scope of protection and preservation of the marine environment, compliance with this provision will be hard to assess. A state can, for example, be very active in cooperation for conservation of living marine resources, but not in the area of climate change. The criteria following from the case law as described in para. 2.1 are therefore of limited relevance. The obligation of art. 197 is further specified in other provisions, such as art. 61(2) that gives an obligation to cooperate for the management of living resources and art. 194 for the prevention of pollution. Moreover, cooperative duties are further specified in art. 198-203 LOSC, containing rules on information exchange, consultation and notification and special assistance for developing states. This are obligations of conduct, as described in para. 2.1. Art. 197 alone is too broad to allow proper assessment using the criteria mentioned.

EU involvement in the IMO negotiations on GHG emissions, as set out in the previous paragraph, has been and remains significant and fulfills the requirements put forward by case law on negotiations in good faith. The active role of the EU on the environment, combined with the broad scope of the provision, make it difficult to conclude based on art. 197 that the EU has not fulfilled its obligation to cooperate specifically related to climate change.

⁹¹ Art. 194 LOSC.

2.4 The relevance of GAIRS-constructions in the LOSC

'GAIRS' refers to the use of the words "shall at least have the same effect as that of generally accepted international rules and standards" or "conforming to and giving effect to generally accepted international rules and standards" in provisions of the LOSC. Provisions formulated in this way make internationally agreed upon standards indirectly applicable to LOSC parties and makes these standards mandatory maximum or minimum standards. If it concerns a minimum standard, a state will be only able to unilaterally adopt more stringent regulations. If it contains a maximum standard, unilateral adoption of more stringent standards or standards on a not yet regulated issue will not be possible. 92 Provisions containing a GAIRS-construction, limiting a state's capacity to unilaterally regulate, can be found inter alia in art. 21(2), art. 211 and art. 218 LOSC. The LOSC Convention particularly limits states ability to prescribe stricter standards on construction, design, equipment and manning. 93 The GAIRS-construction does not contain an obligation to cooperate as such, but limits the residual jurisdiction of states. States that confer with the obligation to cooperate, following from the LOSC or other treaties, cannot unilaterally adopt regulations on topics that contain a GAIRS-construction, despite fulfilling the criteria for cooperating in good faith.

Art. 212 LOSC contains the legal framework for regulation of pollution through the atmosphere and is the provision applicable to MBM for the regulation of GHGs from shipping. The provision contains an obligation to "take into account internationally agreed rules, standards and recommended practices and procedures." This refers to regulations made through cooperative efforts in international forums.

However, no obligation is given to only formulate regulations through international cooperation and no limitation is made similar to art. 211(5) LOSC allowing only the implementation of generally accepted international rules or standards. The use of the wording 'take into account' signals that there is no requirement to confer with internationally agreed rules but merely to consider them. Moreover, the wording used in art. 212 does not correspond with the wording of the LOSC provisions that contain GAIRS requirements (art. 21, 211(5), 218). In those provisions reference is made to

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 ⁹² ILA (2000) Final Report of the International Law Association (ILA) Committee on Coastal State Jurisdiction Relating to Marine Pollution, presented at the 2000 London Conference, p.32; Frank 2007, p. 26.
 ⁹³ As for example in art. 21 LOSC.

"generally accepted rules and standards established through the competent international organization or general diplomatic conference." The choice of different wording seems to indicate that art. 212 is not meant to contain a GAIRS obligation. Art. 212 therefore does not limit a state's ability to unilaterally prescribe regulations relating to pollution through the atmosphere.

Other provisions relevant to a unilateral shipping EU ETS are the provisions on port state jurisdiction, as the scheme will be enforced in port: art. 25(2) and 211(3) LOSC. 95 Both provisions do not contain a GAIRS-construction.

Art. 21(2) relates to regulation for the territorial sea and prohibits the adoption of construction, design, equipment and manning standards that are more stringent than GAIRS. Art. 211(5) makes it only possible to adopt GAIRS for the EEZ. The shipping EU ETS could result in shipping operators having to make improvements on the design of the ship to make it more energy efficient, thus having an indirect effect on CDEM standards applicable, also in the EEZ and territorial sea. However, vessel operators are free to use whatever measures they choose to make a vessel more energy efficient or can buy more carbon credits. A shipping EU ETS would not give direct requirements relating to CDEM standards for vessels navigating in the European territorial sea and EEZ, and would thus not violate the requirements of art. 211(5) and 21(2) LOSC. 96

None of the other LOSC provisions that mention GAIRS are relevant to a unilateral market based measures for reduction of emissions. The LOSC therefore does not limit unilateral regulation on GHG emissions from shipping.

2.5 Chapter recap

Initial reading of art. 2.2 KP could lead to the belief that unilateral regulations outside the IMO are not allowed. However, an interpretation that sees art. 2.2 KP as an obligation to cooperate seems more plausible. This is an obligation of conduct, not

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⁹⁴ Molenaar 1998, p.501.

⁹⁵ In Chapter 1, it was explained that art. 212 and 222 have a *lex specialis* character, but that port state jurisdiction remains unchanged.

⁹⁶ FEA Study by Bäuerle,T, et. al. (2010) *Integration of Marine Transport into the European Emissions Trading System—Environmental, economic and legal analysis of different options*, p. 91.

of result. The EU is bound to negotiate through the IMO in good faith, with the aim of finding a multilateral solution. Negotiations on MBM for the reduction of GHG emissions have been ongoing without significant results. EU member states, and the EU as an observer, have contributed to the negotiations and have fulfilled their obligation to cooperate. The EU cannot reasonably be expected to wait indefinitely, certainly considering the detrimental effects that a continued impasse and inaction in the area of climate change can have on the global environment.

The law of the sea does not prohibit unilateral MBMs for the reduction of GHG emissions. This leads to the conclusion that the EU can establish unilateral market based measures for the reduction of GHG emissions from shipping.

The legality of a future EU Emission Trading Scheme for shipping

3. The legality of the extra-territorial scope of a shipping EU ETS

A legal question that can fundamentally alter the way a future EU ETS for shipping will look like is whether it is lawful for the EU to require foreign vessels entering its ports to surrender allowances for emissions that take place in the territorial sea of other states or the high seas.⁹⁷

The EU ETS will cover emissions that take place beyond the territorial sea of the EU member states and will be flag blind in order to cover sufficient quantities of emissions and avoid carbon leakage. In order for a state to be permitted to enact and enforce its laws, it needs to have jurisdiction. This chapter will asses whether the EU has sufficient jurisdiction to apply an EU ETS that covers emissions taking place beyond its territorial seas to all vessels entering and exiting its ports.

As enforcement of the EU ETS will take place in port, port state jurisdiction is central to answering the question posed in this chapter. Two lines of arguing will be explored. The first line of arguing is that the EU ETS is an exercise of territorial jurisdiction as conduct that violates the EU ETS solely takes place in EU port. The second line of arguing is that the EU ETS is an exercise of jurisdiction over acts taking place beyond EU territory and thus contains extra-territorial elements for which sufficient port state jurisdiction needs to exist.

3.1 Jurisdiction in international law

Jurisdiction is connected to state sovereignty.⁹⁸ It can be described as the basis and the limit of legal competence of a state to make, apply and enforce rules;⁹⁹ the basis,

⁹⁸Mann, F.A (1984), 'The doctrine of international jurisdiction revisited after twenty years', *RCADI* 196:III, pp. 9-116, at p. 20.

⁹⁹ Jennings & Watts 1992, p.456; Gavouneli, M. (2007) *Functional Jurisdiction in the Law of the Sea*, Leiden: Martinus Nijhoff Publishers, p. 6; FEA study, 2010, p. 80.

⁹⁷Ringbom 2011, p.619.

as states are sovereign and can use their power to rule their state by making and enforcing rules; the limit, because the power to prescribe and enforce rules for persons and actions is limited by the competence of other states to do so.

As a general rule, a state does not exercise jurisdiction over conduct beyond its boundaries; jurisdiction is territorial. However, in some instances laws do cover conduct beyond national jurisdiction. The ability of a state to make and apply rules beyond its normal boundaries is referred to as extra-territorial jurisdiction. Such laws can find justification in jurisdictional principles that have been developed in general international law. The exercise of jurisdiction by one state can have an impact on the interests of another. Jurisdictional principles therefore establishes a balance between the powers of different states.

3.1.1 Jurisdictional principles

Jurisdictional principles of international law are:

- 1. Territoriality principle; refers to the sovereign right of states to prescribe and enforce rules for conduct for acts occurring in its territory. Also referred to as principle of territorial sovereignty. Territorial jurisdiction can be subjective and objective. Subjective territorial jurisdiction refers to acts that fully take place in the state's territory. Objective territorial jurisdiction refers to acts that take place partly within and partly beyond the state's territory.
- 2. Nationality principle; refers to the right of states to regulate conduct of their citizens while abroad. The nationality principle is seen as the basis for flag state jurisdiction.
- 3. Protective principle; would grant jurisdiction over acts committed abroad that threaten the political or military security of the state.
- 4. Passive personality principle; refers to acts committed abroad by foreigners that harm a state's citizen.

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¹⁰⁰Molenaar 2007, p. 228.

¹⁰¹Brownlie, I (2003) *Principles of International Law*, Oxford: Oxford University Press, p. 310.

¹⁰²Jennings & Watts 1992, p.457.

¹⁰³Gavouneli 2007 p. 6.

5. Universality principle; refers to certain serious offences, that are seen as of such serious concern to the international community, that all states can exercise jurisdiction over them wherever they take place. An example of such a crime is piracy.

6. Effects principle; refers to activities occurring beyond the territorial jurisdiction of the state but being of direct concern to it. Jurisdiction is then asserted on the basis of its effects within the state.¹⁰⁴

The principles are based on a nexus or connection between the act and the state exercising jurisdiction. Situations are created in which multiple states can have jurisdiction over one act. If such concurrent jurisdictions of states exists, a sufficient nexus is of paramount importance. No generally accepted rules for the balancing of jurisdictions exist. In literature, relied is most often on balancing tests that seek to establish which state has the more convincing nexus. Such a balancing test generally consists of the following elements:

- "Significance of the effects on the state exercising jurisdiction
- The interests of the international community
- The interests of foreign states that are possibly affected by the use of extraterritorial jurisdiction." ¹⁰⁶

The exercise of extra-territorial jurisdiction can also be justified by treaty. States then have consented to changing the normal jurisdictional balance allowing extraterritorial jurisdiction to a state that would normally not have had jurisdiction.¹⁰⁷

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 ¹⁰⁴Jennings & Watts 1992, p. 469-475; Akehurst, M. (1973), 'Jurisdiction in International law', *The British Yearbook of International Law*, Vol.46, pp. 145-257, p. 152-166; Hayashi, M. (2006) 'Objective Territorial Principle or Effects Doctrine? Jurisdiction and Cyberspace,' *International Law*, no. 6, pp. 284-302, p.286; Bownlie, p. 302-308.
 ¹⁰⁵See for example: Akehurst, 1973, p. 154; Jennings & Watts 1992, p. 476; FEA study 2010, p. 86; Ringbom

¹⁰⁵See for example: Akehurst, 1973, p. 154; Jennings & Watts 1992, p. 476; FEA study 2010, p. 86; Ringbom 2011, p. 631-632; Molenaar 1998, p. 87; International Bar Association 2009, p. 23-24. ¹⁰⁶ Quoted from: FEA study p. 86; Akehurst 1973, p. 154; Jennings & Watts 1992, p. 476; Ringbom quotes the

US Restatement (Third) of Foreign Relations Law of the United States (1987), Vol 1, no.1-488, subsection 403(2). The factors mentioned in all articles are a similar, but sometimes contain more detailed versions of the above.

¹⁰⁷Akehurst 1973, p. 152; Molenaar 2007, p. 228-229.

The assertion of jurisdiction based on the objective territoriality principle, protective principle, passive personality principle and effects principle have been contentious. 108

3.1.2 Jurisdiction and law of the sea

The prescription and enforcement of an emission trading scheme is an exercise of jurisdiction by the EU. In order for such exercise to be lawful, it needs to have a basis in the general jurisdictional principles or in a treaty. The jurisdictional system established by the LOSC codifies the general jurisdictional principles. The territorial principle is the basis for coastal state jurisdiction¹⁰⁹ the nationality principle is the basis for flag state jurisdiction¹¹⁰ and the universality principle is the basis of jurisdiction over acts of piracy.¹¹¹ Both territorial and extra-territorial jurisdiction are relevant for the prescription and enforcement of laws by the port state, complicating the legal regime applicable to ports. Because the EU ETS will be enforced in port, port state jurisdiction is central to determine the legality of the EU ETS.

3.1.3 Port state jurisdiction

Port state jurisdiction is the prescription en and enforcement of laws by a state over vessels entering and exiting its ports. Port state jurisdiction is based on customary international law. The principle of territorial sovereignty gives the state jurisdiction over all events happening within its territory. Internal waters, and the ports within it are part of that territory. The port state thus has wide discretion in exercising jurisdiction over its ports.¹¹² McDougal an Burke:

"It is universally acknowledged that once a ship voluntarily enters port it becomes fully subject to the laws and regulations prescribed by the officials of that territory for events relating to such use and that all types of vessels, military and other, are in common expectation obliged to comply with the coastal regulations about proper procedures to be employed and permissible activities within internal waters."

Case law also confirms the wide discretion of states over their ports. In the

¹¹¹Art. 105 LOSC.

¹⁰⁸ International Bar Association 2009, p.11, 12, 14, 149.

¹⁰⁹Art. 2, 21, 56, 77 LOSC.

¹¹⁰Art. 92 LOSC.

Art. 2,8,11 LOSC; Molenaar 2007, p. 227; Fitzgerald, B.F. (1995) 'Port State Jurisdiction and Marine Pollution Under UNCLOS III', *MLAANZ Journal*, vol.11, part 1, pp. 29-38, p. 30.

¹¹³McDougal M.S &Burke, W.T. (1962) *The public Order of the Oceans*, New Haven: Yale University Press, p. 156.

Nicaragua Case the court ruled:

"The legal rules in the light of which these acts of mining should be judged depend upon where they took place. The laying of mines within the ports of another State is governed by the law relating to internal waters, which are subject to the sovereignty of the coastal State. The position is similar as regards mines placed in the territorial sea. It is therefore the sovereignty of the coastal State which is affected in such cases. It is also by virtue of its sovereignty that the coastal State may regulate access to its ports." ¹¹⁴

There exists no general right of access to ports. A state may regulate access to its ports, and thus may also prescribe conditions for entry, or rules of admission. The LOSC contains provisions on port state jurisdiction, art. 25(2), 211(3), 220(1), 218 and 219 LOSC.

Art. 212 and 222 LOSC, that govern the regulation of ship sourced air pollution by states, do not introduce special rules concerning port state jurisdiction. The normal regime of port state jurisdiction is thus applicable to the shipping EU ETS. 116

Port state jurisdiction is increasingly used to effectively enforce laws and regulations. With the increased importance of port state jurisdiction as vehicle of enforcement, the exact scope of port state jurisdiction has become the subject of much debate. In the LOSC, no single article or chapter was adopted to crystalize the regime for port state jurisdiction and the travaux préparatoires of law of the sea conventions do not provide much detail on the development of port competences. Due to the fragmented approach to port state jurisdiction in general law and the LOSC, the legal limits to port state jurisdiction are unclear. Questions regarding to the geographical scope, kind of violations that may be regulated and enforcement measures permissible are not readily answered by looking at the LOSC and consensus among legal scholars is missing.

¹¹⁴Case concerning Military and Paramilitary Activities In and Against Nicaragua (Nicaragua v. United States of America), [1986] I.C.J. Rep., at. 111, para. 213.

¹¹⁵Molenaar 2007, p.228

¹¹⁶Molenaar 1998, p. 503-505; A more detailed description concerning art. 212 and 222 can ben found in chapter

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117</sup>Hare J. (1997) 'Port State Control: Strong Medicine to Cure a Sick Industry', *Journal of International and comparitive law*, no 26 pp. 571-594, p. 571-572.

comparitive law, no.26 pp. 571-594, p. 571-572.

118 United Nations (1956) Articles concerning the Law of the Sea with commentaries; Nordqvist M.H. et. al. (1985) United Nations Convention on the Law of the Sea, 1982: A Commentary, Volume 1, Leiden: Martinus Nijhoff Publishers.

Port state jurisdiction is a complicated topic due to the fact that jurisdiction of the port can be based on several grounds. The port is part of a state's territory and jurisdiction can thus be exercised based on the territoriality principle. Some offences occur in port and are thus fully covered by the territorial sovereignty of the state. Other offences occur at sea, but continue to exist in port. Violation of construction, design, equipment and manning standards are static. The ship will thus be in continuous violation of those standards, also while in port. Port state jurisdiction then also has its basis in the territoriality principle. 119

However, it is possible for a state to use its port to exercise jurisdiction over vessel voluntarily in port, for the enforcement of offences committed at sea before entry into port. Jurisdiction then can still be territorial; if the violation is committed within the territorial sea of the state. For violations in the EEZ, port state jurisdiction is quasi-territorial; the state has sovereign rights and jurisdiction over certain matters, as mentioned in art. 56 LOSC. These are the exploration and exploitation of natural resources, the protection and preservation of the marine environment, marine scientific research and artificial islands, structures and platforms. For other matters exercise of jurisdiction is no longer connected to sovereign rights of the coastal state, through the territoriality principle, but is extra-territorial. Jurisdiction exercised over the high seas is also extra-territorial.

3.2 Two ways of formulating the EU ETS

The way the shipping EU ETS will be formulated is still unclear. Two options exist:

- 1. all vessels entering EU ports must participate in the scheme, e.g. acquire carbon credits. Not participating, or not surrendering enough credits, results in non-compliance and is fined. Compliance with the scheme is then seen as a financial obligation connected to entering the port. The act that leads to violation is the not surrendering allowances in port, or the not participating with the scheme when in port. The act then completely takes place in port.
- 2. All vessels departing for EU ports must participate in the scheme. The whole journey is seen as the act regulated by the EU ETS; the act that eventually leads to violation starts when a vessel destined for the EU leaves its port of

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¹¹⁹Ringbom 2011, p.621-622.

¹²⁰Molenaar 2007, p. 228.

origin and ends when arriving in the EU port while not having enough allowances or not participating. Part of the act can therefore take place beyond EU territory, if the vessel's port of origin is not located in EU territory, and part takes place in EU territory, for the last leg of the journey towards an EU port.

The first option would be covered by the territoriality principle. The second option is more complicated. It could refer to the objective territoriality principle. However, if it is argued that the regulated act takes predominantly place beyond EU territory, it could be an exercise of extra-territorial jurisdiction. In order for such an EU ETS to be lawful, a justification for the exercise of extra-territorial port state jurisdiction needs to exist; based on one of the jurisdictional principles or based on a the law of the sea. Both options will be discussed below.

3.3 Territorial jurisdiction (option 1)

Depending on the way the EU ETS is given shape, it can be argued that the scheme only regulates conduct that takes place in port, as is described by option 1 above. The scheme could then be covered by the port state's territorial jurisdiction.

A port state has territorial sovereignty over its ports. Violations occurring in port and enforced in port are subject to the territorial jurisdiction of the state. The port state then has full jurisdiction. The port state can use onerous enforcement measures against foreign vessels violating its rules, such as monetary penalties and detainment. It is seen as a financial requirement, violation of the scheme occurs in port, if the vessel does not pay, and would thus be fully covered by territorial port state jurisdiction. Such a way of formulating the scheme negates the fact that emissions made beyond national jurisdiction are used to calculate the amount of credits needed or the fine that needs to be paid. Effectively, it does mean that for emissions made on the high seas, a ship needs to pay in an EU port. The conclusion that the EU ETS can be seen as purely taking place in port is therefore hard to justify.

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¹²¹Molenaar 2007, p. 232.

3.4 Territorial jurisdiction: objective territoriality principle (option 2)

If part of the conduct a rule seeks to regulate takes place within a state's territory, and part outside the state's territory, the conduct can still be governed by territorial jurisdiction. Territorial jurisdiction can be based on two principles: subjective territoriality: the sovereign right of states to prescribe and enforce rules for conduct for acts occurring in its territory. This principle cannot cover a shipping EU ETS that is formulated as regulating conduct taking place beyond the state's territory. Objective territoriality, according to Hayashi, can be exercised:

"when only a part of the conduct occurs in the territory while the rest of the conduct occurs abroad. This part of the conduct or a constituent element of the offence in the territory may be a basis on which a State can exercise jurisdiction." ¹²²

Objective territoriality is most often explained with the example of the firing of a gun across a state border causing a homicide on the territory of another state. The objective territoriality principle can be used to exercise jurisdiction by the state where the person died, e.g. where the effects were felt or a constituent part took place. The principle found support in the Lotus case where it was argued by the court that:

"offences, the authors of which at the moment of commission are in the territory of another State, are nevertheless to be regarded as having been committed in the national territory, if one of the constituent elements of the offence, and more especially its effects, have taken place there." ¹²⁴

The objective territoriality principle is easily confused with the effects principle. The main difference is that the effects principle concerns acts that have fully occurred beyond national jurisdiction, while the objective territoriality principle covers acts that take place partly within and partly outside the territory of the state.¹²⁵

Its seems that the ECJ and advocate-general Kokott in Case C-366/10 have relied on the objective territoriality principle for justification of the aviation EU ETS. Kokott writes in her Opinion:

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¹²²Hayashi 2006 p. 286.

¹²³ Brownlie 1998, p. 304.

¹²⁴ S. S. Lotus (France v. Turkey), PCIJ Reports, Series A. No. 10 (7 September 1927), p. 23.

"The territoriality principle does not prevent account also being taken in the application of the EU emissions trading scheme of parts of flights that take place outside the territory of the European Union." ¹²⁶

The ECJ concludes:

"the fact that, in the context of applying European Union environmental legislation, certain matters contributing to the pollution of the air, sea or land territory of the Member States originate in an event which occurs partly outside that territory is not such as to call into question, in the light of the principles of customary international law capable of being relied upon in the main proceedings, the full applicability of European Union law in that territory." ¹²⁷

The objective territoriality principle is not directly mentioned. However, reference is made to two cases: the *wood pulp case* and *Commune the Mesquer case*.¹²⁸ The *Wood pulp case* and the *Commune de Mesquer case* both concern cases in which the act that resulted in a violation commenced in an area beyond national jurisdiction, but ended, or took place for a significant part, within EU territory and in which the effects were felt within EU territory. Both cases are often referred to in discussions of the objective territoriality principle.¹²⁹

It is questionable whether a shipping EU ETS, or the aviation EU ETS, can actually fall under this principle, resulting in territorial jurisdiction. In order to successfully rely on the principle, it is said that at least two of the following three elements need to be present: act, intent, effect. The ECJ in its judgment in case C-366/10 does not address these elements for the aviation EU ETS. Kokott refers to act and effect in her opinion. The interval of the aviation is a constant.

- -Act; the act needs to have occurred at least for some part on the territory of the state exercising the jurisdiction, either through agency, or when the act is started in one territory, and is continued in the states territory.
- Intent; the person committing the act needs to have intended for the harmful effects to be felt in the state exercising jurisdiction.

Woodpulp case, Ahlstrom Osakeyhtio and Others v Commission [1993] ECR I-01307, para 17,18; Commune de Mesquer [2008] ECR I-4501, para. 60-62.

¹²⁶ Case C-366/10, Opinion of Advocate General Kokott, p.45-46, para. 150, 154.

ECJ Case C-366/10, para. 129.

¹²⁹ Hayashi 2006, p. 289; Brownlie 1998, p. 306.

¹³⁰ Aldrich, R.W. (2000) 'Cyber terrorism and computer crimes: issues surrounding the establishment of an international legal regime' *USAF INSS Occasional Paper* no. 32, p. 37-40; The three elements are derived by Aldrich from national case law from the United States and Australia on criminal law. Such cases are: Lamar v. United States, 240 U.S. 60, 65-66 (1916). Horowitz v. United States, 63 F.2d 706, 709 *cert. denied*, 289 U.S. 860 (1933). Ford v. United States, 273 U.S. 593, 623 (1927). The three elements do not follow clearly from the ECJ cases mentioned

cases mentioned.

131 Case C-366/10, Opinion of Advocate General Kokott, p.45-46.

- Effects; The actual effects have to be felt within the state exercising jurisdiction. ¹³² If jurisdiction can be derived from the objective territorially principle, concurrent jurisdictions of states will exist. A sufficient nexus between the state exercising jurisdiction needs to exist and balancing jurisdictions, as described in para. 3.1, will be relevant.

For voyages covered by the shipping EU ETS it is clear that a constituent element of the act takes place in EU territory; only ships that are part of commercial routes to and from the EU are covered by the scheme. Each of those voyages takes partly place within EU territory. By applying the scheme only to those vessels, the first element is fulfilled. However, it will be difficult to come to the conclusion that the EU has the strongest link, compared to third states that can also rely on some form of jurisdiction, as the act includes emissions at the place of origin of the ship, emissions on the high seas and territories of third states and only finishes by calling at an EU port. The fact that it concerns vessels that are part of a commercial route to the EU will not be convincing if the act predominantly takes place beyond national territory. Moreover, vessels will not have the intent to harm the environment by undertaking the journey. Shipping is generally even seen as a relatively green mode of transport. 133

The effects of the act, the consequences of GHG emissions, will be felt in Europe. 134 However, effects will be felt by states around the world. The European Union will not uniquely be affected by the emissions.

Assessing the presence of the elements leads to the conclusion that there is no sufficient nexus between the emissions the EU ETS seeks to regulate and the EU to base jurisdiction on the objective territoriality principle. Reliance on the territoriality principle for the exercise of jurisdiction to enact and enforce the shipping EU ETS is not likely to succeed.

Aldrich 2000, p.37-40; Hayashi 2006, p. 286.
 IMO (2009) Second IMO GHG Study 2009, London: International Maritime Organization, p. 8.

¹³⁴ Cause-and-effects discussions with regard to GHG emissions and climate change are beyond the scope of this

3.5 Extra-territorial port state jurisdiction (option 2)

An EU ETS that is seen as predominantly regulating conduct of foreign vessels beyond the territorial sea of EU member states concerns an exercise of extraterritorial jurisdiction. Such an EU ETS would impinge on the jurisdictional rights of other states and would potentially violate provisions of the LOSC that guard the balance of jurisdictions between states. These provisions are:

- Sovereignty of non EU-states over their territorial sea
- Freedom of the high seas
- Exclusivity of flag state jurisdiction

A coastal state has sovereignty and exclusive jurisdiction in its territorial sea. It has the sole authority to prescribe and enforce rules. 135 A shipping EU ETS that covers the entire voyage of a foreign vessel destined for an EU port, also covers part of the voyage of the vessel in the territorial sea of the state of departure, and territorial seas of states it might cross to get to an EU port. Those territorial seas are not necessarily of EU member states. The exercise of jurisdiction by a state that covers activities undertaken in the territory of another state impinges on the sovereignty of that state.

The high seas are beyond national jurisdiction and governed by a regime of freedoms. 136 Vessels on the high seas are subject to exclusive flag state jurisdiction save in exceptional cases expressly provided for in international treaties. 137 This means that application of EU laws to EU vessels on the high seas is uncontroversial. A shipping EU ETS applicable to the entire voyage of all vessels calling at EU ports would also cover part of the voyage of foreign vessels on the high seas and in the EEZ. 138 The shipping EU ETS impinges on exclusive jurisdiction of the flag state by regulating high seas behavior of non-EU vessels. The prescription of regulations applicable to foreign vessels on the high seas is an exercise of sovereignty, in violation of the prohibition of art. 89 LOSC and 92 unless an exception is provided for.

137 Art. 92 LOSC.

¹³⁵Art. 2, 21(1) LOSC.

¹³⁶ Art. 87, 89 LOSC.

¹³⁸ The EEZ in this case falls under the high seas regime, because the coastal state has no jurisdiction over vessel source air pollution in its EEZ, based on art. 56, 58 and 212 LOSC.

These rules form the basis of the argument that a shipping EU ETS that covers emissions beyond the maritime zones of EU member states violates international law. In case ECJ C-366/10 it was argued by one of the parties that an EU ETS that covers the parts of a voyage above the territorial sea of another state or the high seas results in the illegal exercise of extra-territorial jurisdiction.¹³⁹

The exercise of extra-territorial jurisdiction needs to have a basis in a treaty or in the jurisdictional principles, as was set out in para. 3.1. Unless a legal justification for the EU ETS exists, the scheme will be an unlawful exercise of extra-territorial jurisdiction, in violation of several provisions of the LOSC.

3.5.1 Justifications in the Law of the Sea

Port state jurisdiction could potentially contain a justification for extra-territorial jurisdiction. Much is dependent on the way port state jurisdiction is interpreted.

A broad interpretation of port state jurisdiction

A broad interpretation of port state jurisdiction finds its basis in general international law and the territoriality principle. Port state jurisdiction directly relates to a state's sovereignty over its territory and could therefore be interpreted broadly; unlimited port state jurisdiction. Following this line of reasoning, Ringbom writes: "ships remain free to ignore the port State's rules by not calling at one of its ports. By choosing to call at one of those ports, however, they also accept to comply with the entry conditions of the port State, even if those conditions relate to matters that took place outside the territorial jurisdiction of the port State." This line of reasoning mixes territorial and extra-territorial elements and is also used by the ECJ in case C-366/10. The court finds that the scope of the aviation EU ETS directive:

"does not infringe ... the sovereignty which the third States from or to which such flights are performed have over the airspace above their territory, since those aircraft are physically in the territory of one of the Member States of the European Union and are thus subject on that basis to the unlimited jurisdiction of the European Union."

The Court then argues

"It is only if the operator of such an aircraft has chosen to operate a commercial air route arriving at or departing from an aerodrome situated in the territory of a

¹⁴⁰Ringbom 2011 p.625.

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¹³⁹ ECJ C-366/10, Observations of the Claimant, para.90, p.24.

Member State that the operator, because its aircraft is in the territory of that Member State, will be subject to the allowance trading scheme." ¹⁴¹

The court thus relies on the same argumentation proposed by Ringbom. Extraterritorial and territorial elements are mixed as the right to prescribe access requirements is based in territorial sovereignty. The argument is that when a vessel is part of a commercial route to the EU, it asks entrance to EU ports. An access requirement is then compliance with EU and domestic rules, even if those rules relate to extra-territorial conduct. The right to take access requirements, that is not clearly limited in art. 25(2) and 211(3) LOSC, justifies the rules of the port concerning extra-territorial conduct.

As basis for its argumentation in C-366/10, the ECJ refers to the *Poulsen case*. ¹⁴² This case on the arrest of a Panama flagged vessel in a Danish port deals with port state jurisdiction. The vessel had caught fish outside of the maritime zones of EU member states. When arriving in a Danish port, it was concluded that the fish was caught in contravention of EC regulations. The vessel was arrested, its cargo seized and sold and its crew brought before court. The ECJ judged that EC regulations may be applied to a foreign vessel when it is in port, where it is "generally subject to the unlimited jurisdiction of that State". Confiscation and sale of cargo was therefore possible. ¹⁴³ This concerns a broad interpretation of port state jurisdiction that allows for the exercise of extra-territorial jurisdiction and would enable EU port states to subject foreign vessels in their ports to a shipping EU ETS that takes into account parts of voyages taking place in non-EU territorial seas and the high seas and oblige those vessels to pay additional fees or fines if allowances are exceeded.

This interpretation is not consistent with the provisions on port state jurisdiction in the LOSC. The provisions on port state jurisdiction – art. 25(2) – may not give specific limits to port state jurisdiction, but do only mention a right to impose port entry requirements. The port state may prevent infringements of the port entry requirements, referring to a right to deny access to the port. No unlimited jurisdiction

¹⁴¹ECJ C-366/10, para. 124-128.

¹⁴² ECJ C-366/10, para. 123-124; ECJ Case C-286/90, Anklagemyndigheden v. Poulsen and Diva Navigation, Judgment of 24 November 1992 [1992] ECR I-6019. The Poulsen case concerned a vessel that had entered a Danish port due to force majeur. The part of the reasoning of the court used for this paper deals with port state jurisdiction over vessels that enter the port under normal circumstances, e.g. for commercial purposes.

¹⁴³ Poulsen Case, para. 3,4,28, final judgment.

is given to the port state for vessels that are accepted into port. While it is true that port state jurisdiction is related to sovereignty over territory, sovereignty does not allow a state to prosecute foreigners in their territory for the violation of its laws when violation took place abroad. A sufficient nexus then needs to exist, as given by the jurisdictional principles developed in international law – the nationality principle, universality principle, effects principle, protective principle and passive personality principle - or a basis needs to exist in a treaty. This brings us back to the original question of this paragraph.

A narrow interpretation of port state jurisdiction

A narrow interpretation of port state jurisdiction is based in a textual analysis of the provisions of the LOSC.

Art. 25(2) is the central provision of the LOSC dealing with port state jurisdiction. According to art. 25(2) the coastal state can, in the case of ships proceeding to internal waters or calling at a port facility outside internal waters, take the necessary steps to prevent any breach of the conditions to which admission of those ships to internal waters or such a call is subject. Art. 211(3) confirms this, by requiring that states which establish particular requirements for the prevention, reduction and control of pollution of the marine environment as a condition for the entry of foreign vessels into their ports or internal waters or for a call at their off-shore terminals give due publicity to such requirements and communicate them to the competent international organization. Art. 25(2) and 211(3) LOSC only refer to port entry requirements, not to any other possible port state measures and do not specify to what maritime zones port state regulations can relate. Both provisions do not mention legislative rights directly, prescriptive jurisdiction has to be read in, based on general international law.¹⁴⁴

Art. 218 LOSC seeks to regulate illegal discharges that occur beyond coastal state jurisdiction. It gives the port state the jurisdiction to undertake investigations and, where the evidence so warrants, institute proceedings in respect of any discharge from that vessel outside the internal waters, territorial sea or exclusive economic zone of that State in violation of applicable international rules and standards. This provision is the only article in the LOSC directly referring to extra-territorial port state jurisdiction. Its application, however, is limited to illegal discharges in violation

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¹⁴⁴Molenaar 2007, p.233.

of applicable international rules and standards established through the competent international organization or general diplomatic conference. Unilateral rules and regulations applicable to foreign vessels beyond national jurisdiction cannot be enforced in port using art. 218 LOSC, nor can regulations relating to other violations than illegal discharges.

Art. 25(2), 211(3) do not give clear guidance on the scope of port state jurisdiction. However, combining art. 25(2), 211(3) and 218 could be used to draw one conclusion. The existence of 218 could indicate that Art. 25(2) and 211(3) are not sufficient as a basis for extra-territorial port state jurisdiction. Art. 218 is included in the LOSC to provide sufficient legal basis for regulation of illegal discharges that take place beyond the national jurisdiction of the port state. For other requirements or standards, such a provision does not exist. This narrow interpretation of port state jurisdiction could lead to the conclusion that extra-territorial port state jurisdiction for other standards or requirements, such as the EU ETS, does not exist based on the law of the sea. 146

An interpretation based on the right to prescribe port entry conditions

A third option that represents a middle way between the previous interpretations exists. This option is mainly developed by Molenaar, ¹⁴⁷ and is also mentioned by Ringbom with regards to the shipping EU ETS. The main line of reasoning is that the legality of extra-territorial measures is also dependent on the kind of enforcement measure that is chosen. A distinction is made between types of enforcement measures used in port; denial of entry to port and port services being less onerous measures, and detainment or confiscation of vessel/cargo and fines being more onerous measures. It is argued that, based on the broad port state jurisdiction and the lack of a right of access to port, the port state can prescribe rules that extend beyond its territorial jurisdiction and enforce those rules using the less onerous measures. For more onerous measures relating to violations beyond its maritime zones, a specific legal ground, such as art. 218 is necessary. ¹⁴⁸ Ringbom therefore argues that it is easier to justify an extra-territorial application of a future EU ETS for shipping if the

¹⁴⁵Ringbom 2011, p. 625.

¹⁴⁶Ringbom 2011, p.624-625.

¹⁴⁷ In: Molenaar, E.J. (2007) Port State Jurisdiction: Toward Comprehensive, Mandatory and Global Coverage, Ocean Development &International Law, Volume 38, Issue 1-2, pp. 225-257.

¹⁴⁸Ringbom 2011, p. 626-627; Molenaar 2007, p.229

enforcement measures chosen are denial of access to ports or port services, rather than fines or detainment, as was suggested by others.¹⁴⁹

Looking at the relevant articles is the LOSC, this third option seems to be the most plausible. Art. 25(2) and 211(3) recognize the right of the port state to set unilateral port admission conditions. They specifically refer to conditions for admissions into and do not mention other measures. The lack of any limitation mentioned in the provisions supports the conclusion that port entry requirements can also relate to extra-territorial actions. Art. 218 LOSC provides coastal states with the possibility to use more onerous enforcement measures for discharge violations occurring beyond the port state maritime zones. The fact that such an article is missing for other illegal actions leads to the conclusion that while port entry requirements can relate to extra-territorial behavior, more onerous enforcement measures need an additional basis in international law, as is created for illegal discharges art. 218 LOSC. The lack of a provision making it possible for port states to use more onerous port state measures for extra-territorial violation of rules relating to air pollution makes the use of such measures unlawful.

Such a conclusion is contrary to the argumentation of the ECJ in the *Poulsen case*. The confiscation of the catch constitutes an onerous enforcement measure. For the use of more onerous enforcement measures, a clear basis in law is necessary. Such is missing for illegal fishing outside maritime zones of the port state.

In summary, if is chosen for enforcement through denial of port entrance or services, the shipping EU ETS seems to stay within the legal limits of port state jurisdiction. The right to prescribe port access conditions result in the possibility for the port to prescribe extra-territorial rules, e.g. rules relating to emissions that occurred beyond national jurisdiction, but would limit enforcement options for those rules. Enforcement of the EU ETS through the use of fines, as is now the case for the aviation EU ETS, is not consistent with international law.

3.5.2. Justification found in other treaties

Other treaties do not give any ground for justification. The ECJ in case C-366/10, seems to refer to UNFCCC, KP and the TFEU to justify the aviation scheme:

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¹⁴⁹Ringbom 2011, p. 627; CE Delft 2009, p.163.

"as European Union policy on the environment seeks to ensure a high level of protection in accordance with Article 191(2) TFEU, the European Union legislature may in principle choose to permit a commercial activity, in this instance air transport, to be carried out in the territory of the European Union only on condition that operators comply with the criteria that have been established by the European Union and are designed to fulfill the environmental protection objectives which it has set for itself, in particular where those objectives follow on from an international agreement to which the European Union is a signatory, such as the Framework Convention and the Kyoto Protocol." ¹⁵⁰

It is argued that the EU ETS is imposed to fulfill EU environmental goals laid down in the TFEU and EU obligations following from international agreements. This seems to refer to a legal basis for the measures in a treaty and seems to address the alleged unilateral character of the EU ETS.

The treaties mentioned cannot serve as a justification for the extra-territorial scope of the aviation EU ETS. The fact that the EU ETS would help fulfill treaty obligations of the EU does not diminish its unilateral character. The measures are consistent with the goal of multilateral treaties such as the UNFCCC and the Kyoto Protocol, namely to reduce emissions to combat climate change. However, the EU ETS goes beyond what is agreed upon in those treaties. Emissions from shipping are not regulated in the UNFCCC and KP, as was discussed in chapter 2, and application of extraterritorial measures to combat climate change is not mentioned in both agreements. The TFEU cannot serve as justification basis towards non-EU states as this is a regional arrangement. The TFEU is not binding upon third parties. Moreover, measures chosen to fulfill treaty obligations need to be consistent with international law and have to respect the rights of other states. The reasoning of the court does not give strong support to its argumentation towards legality of the EU ETS. The UNFCCC, Kyoto Protocol and TFEU cannot serve as a justification for extraterritorial port state jurisdiction for a shipping EU ETS.

3.5.3 Justification by jurisdictional principles

Not only law of the sea can potentially provide justification for the extra-territorial exercise of jurisdiction, the jurisdiction principles - the nationality principle, universality principle, effects principle, protective principle and passive personality principle - could as well. The effects principle offers most potential as a justification ground for a shipping EU ETS.

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¹⁵⁰ ECJ C-366/10, para. 128.

The nationality principle serves as justification of jurisdiction over vessels registered to EU member states and sailing on the high seas. The EU ETS can be applied to those vessels based on flag state jurisdiction. For regulation of foreign vessels, flag state jurisdiction or nationality principle, cannot be relied upon by the EU.

The universality principle is only relevant for certain serious offences, such as piracy, and is therefore not applicable.

The protective principle can only be relied upon when there is a real and direct threat against the military or political security of the state. No reliance by the EU on this article is thus possible.

The passive personality principle is only relevant when EU citizens are harmed. This is not the case.

The effects principle is the only principle that on first glance can be applied to a shipping EU ETS. It can be argued that climate change will have significant adverse impacts that also extend to the EU. Climate change is seen as a collective action problem, of great concern to the international community. The EU therefore has significant interest in the regulation of GHG emissions globally and is recognized by the Kyoto protocol as one of the actors specifically responsible for mitigating climate change.

The effects principle

The effects principle is developed to regulate activities occurring beyond territorial jurisdiction of the state but being of direct concern to it. Jurisdiction is then asserted on the basis of its effects within the state. The effects principle has been developed in anti-trust and competition cases, mainly in the United States. 151 The effects principle covers activities occurring beyond territorial jurisdiction of the state but being of direct concern to it. Jurisdiction is then asserted on the basis of its effects within the state. In order for a state to be able to rely on the principle, the extra-territorial effect needs to be direct and objectively determinable. Moreover, the effects cannot be 'mere consequences or repercussions of the act done', incidental or insubstantial. 152

The state asserting extra-territorial jurisdiction needs to show that the effects on its

¹⁵¹ See for example: US v Aluminium Company of America (1945) 148F2d 416; US v Watchmakers of Switzerland Information Centre (1963) Trade cases 77, 414; US v General Electric Co (1949) 82 F Suppl 753. Jennings & Watts 1992, p. 474-475

territory or sufficiently strong compared to the effects on other countries. A balancing test of competing interests of the states concerned needs to be undertaken, taking into account: 153

- 3. "Significance of the effects on the state exercising jurisdiction
- 4. The interests of the international community
- 5. The interests of foreign states that are possibly affected by the use of extraterritorial jurisdiction."154

The effects principle seems a potentially useful principle for application in environmental problems. The law of the sea already contains some provisions that seem to have elements of the effects principle. The 1969 Intervention Convention, for example, allowing a coastal state to take measures beyond its territorial sea against a vessel involved in a maritime casualty threatening its coasts with major harmful pollution, 155 can be seen as using the effects principle for extra-territorial measures. Some authors discuss the effects principle as a potential tool for coastal states to protect their coastlines from oil pollution damage. 156 However, the application of the effects principle as justification for extra-territorial jurisdiction in general, and in environmental cases in particular, remains highly controversial and does not represent settled international law. 157

The shipping EU ETS seeks to reduce GHG emissions from shipping in an effort to combat climate change. It is generally held that climate change will have significant impacts on Europe. The regulation of emissions from foreign shipping thus could be based on the significant negative effects those emissions will have on the European continent. It is questionable, however, whether the effects of those emissions meet the requirements of the balancing test imposed by international law. Several arguments that are instructive for possible reliance on the effects principle for the

¹⁵³ Jennings & Watts 1992, p. 476-477.

Ouoted from: FEA study 2010, p. 86; Akehurst 1973, p. 154; Jennings & Watts 1992, p. 476; Ringbom quotes the US Restatement (Third) of Foreign Relations Law of the United States (1987), Vol 1, no.1-488, subsection 403(2). The factors mentioned are a similar, but more detailed version of the above.

¹⁵⁵ Art. 1 of 1969 International Convention Relating to Intervention on the High Seas in Cases of Oil Pollution

Casualties, OS – 29 November 1969, EIF – 6 May 1975, 970 UNTS 212, *Basic Documents* No 14.

156 For example: Mooradian C.P. (2002) Protecting "Sovereign Rights": The Case for Increased Coastal State Jurisdiction over Vessel-Source Pollution in the Exclusive Economic Zone, Boston University Law Review vol. 82, pp.767-816, p.783; Burghelea G. (1996) The Extraterritorial Application of Antitrust Law and the National Environmental Policy Act: A Comparative Study, Georgetown International Environmental Law Review no.8, pp. 351-373, p.354

⁷Jennings & Watts 1992, p.475.

shipping EU ETS were brought forward by parties in ECJ case C-366/10. It was submitted that "the EU is not uniquely affected by climate change" and that

"the State seeking to extend its regulation over another State's territory lacks a sufficient nexus or clear connecting factor to the object of the conservation. The ostensibly harmful effect of the extraterritorial conduct is not directly and substantially felt in the regulating state, but, if anywhere, in the State where the conduct occurred. And, what is more, airlines have no [...] intent to change the European climate by their emissions over North America."

And:

"The recognition of an 'effects' principle to justify the adoption of extraterritorial legislation would be particularly inappropriate in relation to global environmental measures. For example, it could be invoked to give the EU a right to adopt legislation in respect of the use of aerosols in Australia or coal-burning power stations in China." ¹⁵⁹

These are strong arguments that the EU ETS will not pass the balancing test required for the application of the effects principle to be possible. And this is leaving cause and effects discussions of emissions and climate change aside.

If the EU ETS is formulated as an exercise of extra-territorial jurisdiction, such jurisdiction can be justified by the law of the sea. Enforcement of the scheme can be done through he right of the port to impose access requirements, a right well established in international law. The LOSC does not seem to support the use of more onerous enforcement measures. Other jurisdictional principles do not support an EU ETS with extra-territorial scope.

3.6 Chapter recap

The legality of an EU ETS that includes the entire voyage remains somewhat unclear, as it is, at this point in time, unknown how exactly the scheme will be formulated.

If the scheme is seen as a financial obligation upon entry into port, the territorial principle can serve as a basis for the exercise of jurisdiction. It is doubtful however, if such formulation of the scheme is reasonable, as emissions beyond national

¹⁵⁸ECJ Case C-366/10 Intervention IATA, p. 69.

¹⁵⁹ ECJ C-366/10, Observations of the Claimant, p. 23 para 88.

jurisdiction are used to calculate the amount to be surrendered. Territorializing the offence negates any extra-territorial elements.

The objective territorial principle cannot serve as a basis for the exercise of jurisdiction. Due to the lack of a sufficient nexus between the emissions and the EU, successful reliance on this principle is unlikely. The ECJ seems to refer to this principle in its judgment in case C-366/10. The courts reasoning is not well substantiated and is therefore not convincing, or instructive, for a shipping EU ETS.

If the EU ETS concerns an exercise of extra-territorial jurisdiction, the use of port state jurisdiction could result in a lawful situation. The scope of port state jurisdiction is much debated and different interpretations exist. Much depends on the interpretation of port state jurisdiction that is chosen. The argument that legality of the exercise of extra-territorial port state jurisdiction depends on the kind of enforcement measure chosen seems most plausible. This means that, based on the right of port states to prescribe conditions for entry into port, the port state can deny foreign vessels that do not comply with the shipping EU ETS access to port or port services. The use of more onerous measures, such as detainment or monetary penalties, would result in an unlawful situation as a clear basis in international law, supporting the use of such measures, is missing.

Remains that extra-territorial port state jurisdiction, and art. 25(2) and 211(3) leave significant room for debate, protest and thus uncertainty. Other treaties do not provide a justification for the exercise of extra-territorial jurisdiction. Of the jurisdictional principles that can justify the exercise of extra-territorial jurisdiction, the effects principle is the only principle that can be connected to the EU ETS. Reliance on the effects principle cannot justify an extra-territorial EU ETS as a sufficient nexus between the conduct regulated and the EU cannot be established. Moreover, the effects principle is contentious, leading to a shaky foundation for an already much debated measure.

The legality of a future EU Emission Trading Scheme for shipping

Conclusion

The EU, being a frontrunner with regards to environmental protection, often implements controversial new measures that lead to significant protests from states and industries affected. The plan to establish a shipping EU ETS was met with protests regarding the legality of the proposed measures. An aviation EU ETS has also lead to legal challenges, leading to a case before the ECJ. The shipping EU ETS is still being shaped but is expected to cover emissions made during the entire voyage of all vessels calling at EU ports, thus including parts of voyages through the territorial seas of non-EU states and the high seas, similar to the aviation EU ETS. There are several legal questions that potentially arise from a shipping EU ETS. In

- this thesis is two of these questions were addressed:
- 1. Can the European Union unilaterally regulate greenhouse gas emissions from shipping?
- 2. To what extent is an EU ETS that covers voyages from non-EU vessels that take place beyond EU territory in conformity with international law?

The first question relates to the general recognition of environmental problems as collective action problems for which the cooperation of states is needed. Sovereignty of states to take unilateral action may be limited by a general duty to cooperate or a more specific obligation to work through the IMO for reduction of emissions from shipping found in art. 2.2 KP. The obligation to cooperate is an obligation of conduct, not of result. It is given substance through procedural requirements, most importantly a duty to negotiate in good faith. Art. 2.2 KP also entails a duty of conduct, obliging states to use the IMO as primary forum for negotiations. The EU is bound to negotiate through the IMO in good faith, with the aim of finding a multilateral solution.

Negotiations on MBM for the reduction of GHG emissions have been ongoing without significant results. EU member states, and the EU as an observer, have contributed to the negotiations and have fulfilled their obligation to cooperate within

the IMO. The EU cannot reasonably be expected to wait indefinitely, certainly considering the detrimental effects that a continued impasse and inaction in the area of climate change can have on the global environment.

Nothing in the LOSC prohibits adoption of unilateral market based measures for the reduction of GHG emissions by the EU. This leads to the conclusion that the EU can establish unilateral market based measures for the reduction of GHG emissions from shipping. The unilateral measures taken do need to be in conformity with international law.

The second question relates to the expected scope of the EU ETS. The legality of an EU ETS that includes the entire voyage remains somewhat unclear, as it is at this point unknown how the scheme will be formulated.

If the EU ETS is seen as an exercise of territorial jurisdiction, its extra-territorial elements have to be taken into account. This results in reliance on the objective territoriality principle. The existing concurrent jurisdiction of the EU and other states over vessels in certain areas makes a sufficiently strong nexus between the EU and the emission acts necessary. A sufficient nexus could not be established: because only a potentially small part of the act takes place in EU territory, because the EU is not uniquely affected by negative consequences of GHG emissions, because the EU ETS has significant financial consequences for the shipping industries of other states and emissions do not occur intentionally, successful reliance on the objective territoriality principle is unlikely.

If it concerns an exercise of extra-territorial jurisdiction, the use of port state jurisdiction can result in a lawful situation. Legality of the shipping EU ETS is dependent on the enforcement measures chosen. If access to ports is made conditional on compliance with the scheme, port state jurisdiction offers a sufficient jurisdictional basis. The use of fines for non-compliance, as used for the existing EU ETS, will result in the unlawful exercise of extra-territorial port state jurisdiction.

As the shipping EU ETS and aviation EU ETS are likely to have the same characteristics, the ECJ case C-366/10 has proven to be a useful source of legal arguments for and against the shipping EU ETS for both research questions. The ECJs final judgment can however not be regarded as an authoritive decision on the matter. This not only due to the fact that court cases are merely a subsidiary source of

international law, but also due to the European law system. The final judgment does not address both questions due to the direct effect test necessary to rely on international law before the ECJ. Art. 2.2 KP is therefore disregarded. Moreover, the judgment concerning the second question is somewhat cryptical and at points unconvincing. The motivation given by the court is regrettably short and a very broad interpretation of port state jurisdiction is adopted, that is not supported by recent state practice, customary international law or the provisions of the LOSC.

The ECJ judgment has not abated protests of states regarding the aviation ETS. Legal challenges will also persist for a shipping EU ETS with similar scope. In this thesis, it is concluded that the EU can take unilateral MBM measures on GHG emissions from shipping and that an EU ETS that covers the entire voyage can be lawfully effectuated through the right to deny access to ports.

In this thesis several different arguments and interpretations were discussed. Especially the regime on port state jurisdiction remains difficult to conclusively interpret. Legal challenges to a shipping EU ETS may lead to intensified academic debate on the matter and lead to further crystallization of this useful tool for the enforcement of marine environmental protection measures.

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