FINLAND’S AMBIVALENT SULPHUR POLICY IN THE MIDST OF A CHANGING REGULATORY FRAMEWORK GOVERNING AIR POLLUTION FROM SHIPS

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ABSTRACT: The article examines Finland’s policy as regards to the air pollution from ships, currently regulated under the International Convention for the Prevention of Pollution from ships MARPOL and its Sixth Protocol on Air Pollution; an issue that is regulated not only by international law, but also in particular under the European law. The Air Pollution protocol requires far-reaching commitments from its parties to minimize sulphur and nitrate oxide emissions from ships, particularly in the emission control areas. One of these emission control areas is located in the Baltic Sea, Finland being one of its littoral states, because of the changes to the air pollution protocol found itself to be in a situation when its economic and environmental protection interests collided. On the one hand, the revisions to the protocol caused heavy costs for the ship transport in the Baltic Sea, which is very important means for delivering export goods to the markets. On the other hand, mitigating air pollution is of vast importance from the viewpoint of protecting the ecological systems of Baltic Sea. Because of commercial reasons, Finland opted out of the air pollution protocol of MARPOL, when revisions were made to this protocol in 2005. The country is bound to follow the EU law, which also regulates shipping emissions, given that it is one of the Member States of the European Union. The main research question pursued in this article is whether Finland can release itself from the obligations contained in the revised air pollution protocol by opting out of the protocol, in light of the country’s obligations under European law.
CONTENTS

I. EVOLVEMENT OF THE INTERNATIONAL AND EUROPEAN UNION REGULATORY SCHEMES FOR SULPHUR EMISSIONS FROM SHIPS
   A. The EU Sulphur Policy with Particular Emphasis on Sulphur Emissions from Ships
   B. The Entry into Force of Annex VI and its Impact on the Sulphur Policy and Law of the EU
   C. Comprehensive Amendments to Annex VI in 2008

II. FINNISH LEGAL RULES AND THE BASIS OF THEIR OBSERVATION
   A. Analysis from the Perspective of International Law
   B. Analysis from the Perspective of the Law of the European Union

CONCLUSION

INTRODUCTION

Finland has been one of the leading states in advancing strict measures for the protection of the environment of the Baltic Sea, particularly under the Convention on the Protection of the Marine
Environment of the Baltic Sea Area, 1992\(^1\), which entered into force on 17\(^{th}\) January, 2000, establishing the Helsinki Commission (HELCOM) as its governing body. Lately Finland and the other Baltic Sea littoral states and increasingly the European Union (EU) have paid greater attention to the state of the environment of the Baltic Sea that has been seriously deteriorating over the past decades.\(^2\)

The cause of environmental pollution in the Baltic Sea derives from many sources. Land, rivers, industrial wastes and surface runoff by farming are the biggest sources of pollution for all ocean environments\(^3\), which is also the case for the Baltic Sea. Besides, vessel-source pollution also has a serious impact on this semi-enclosed brackish water sea, the vulnerable ecosystems of which are losing their resilience in many places. The volume of vessel traffic has increased by the day in the Baltic Sea\(^4\) and, for this reason, the Baltic Sea littoral states have caused the International Maritime Organization (IMO) to designate the Baltic Sea as a particularly sensitive sea area (PSSA), a goal that was achieved in 2005.\(^5\)

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governs intentional pollution from ships – the International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978 (MARPOL), its environment is further protected from the pollution caused by shipping. The Baltic Sea has been designated as a special area under Annex I (oil) and V (garbage), and as a sulphur emission control area (ECA) under Annex VI (air pollution), which are examined in detail later in this article.

Against this background, it is worth noting that the Government of Finland has been paying due attention to the protection of the environment of the Baltic Sea. The new Government of Finland, which was formed in spring 2011, puts special emphasis on protecting the Baltic Sea in its official plan adopted on 22nd June, 2011. The plan contains a separate chapter on the protection of the environment of the Baltic Sea and establishes a special Governmental coordination committee to attain this goal. The official plan also articulates the problems faced by Finland in endorsing the strict regime prescribed by Annex VI for the limits on sulphur content in fuels used in ships, in particular in the Baltic Sea. The Governmental plan underscores that the country’s foreign trade is heavily dependent on transportation by the sea and, thereupon, it also promises to actively indulge in international negotiations towards setting environmental standards for ships so as not to cause such Finnish companies to bear unreasonable costs that are majorly reliant on

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transportation by ships⁹. As per the commissioned assessment by the Ministry of Transport and Communications, due to the difficult conditions to operate ships in the Baltic Sea, the newly prescribed limits on sulphur content in fuels are likely to increase costs of fuel for vessels transporting Finnish goods to foreign markets by approximately 2 million Euros per year.¹⁰

As a result, Finland has found itself captured in a classical dilemma of whether to advance environmental protection to the only sea bordering the country, the Baltic Sea, or, advance short-term economic gains by opting out of the MARPOL Annex VI regime. On that account, this article questions as to whether or not Finland can opt out of the Annex VI regime, considering that it opted out of the revisions of the Annex VI regime and given that the country’s economic interests to do so are perceived as enormous and, if not, which rules are to govern its conduct in this issue, those enacted by the IMO or the EU? Being a Member State of the EU, Finland is bound to follow the EU law, particularly in the fields where the EU has prescribed specific regulations. This article highlights the extremely complex regulatory framework binding the Member States of the EU.

The article proceeds as follows. First, it brings to light how the air pollution regime of MARPOL Annex VI and sulphur regime of the EU have evolved to this date, and describes the role performed by Finland in developing these two regimes. In this regard, it is of utmost importance to

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⁹ Id. at 49.
carefully examine the major problem posited for Finland by the revisions of Annex VI adopted in 2008 and how Finland, the EU and its Member States, and HELCOM have responded to them. And, thereupon, the article deduces with reasons the rules Finland is to follow.

I. EVOLUTION OF THE INTERNATIONAL AND EUROPEAN UNION REGULATORY SCHEMES FOR SULPHUR EMISSIONS FROM SHIPS (PARTICULARLY THE BALTIC SEA SULPHUR EMISSION CONTROL AREA11)

Since shipping is a global activity, various aspects of shipping, including pollution, are regulated by the conventions adopted under the auspices of the International Maritime Organization (IMO). Pollution caused by shipping is primarily regulated by the International Convention for the Prevention of Pollution from Ships, 1973 as modified by the Protocol of 1978 (hereinafter MARPOL). MARPOL, the Convention together with its Protocol and two Annexes (now six) entered into force on 2nd October, 1983. It is a legally binding international convention for all states parties

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11 See UNTS, supra n.6; See also 2005 O.J. (L 327) 1 (“The terminology varies, to some extent, in this report on the Sulphur Emission Control Areas as these were originally abbreviated as SECA areas for the reason that the original Annex VI enables emission control areas only for sulphur oxides (and, in principle, Finland is at the moment part of SECA area). The 2005 EC’s sulphur Directive used the abbreviation SOx emission control areas, in line with the original Annex VI. This changed, however, with the revised 2008 Annex VI, which made it possible to have emission control areas for nitrate oxides, sulphur oxides and particulate or all of them. Now they are called emission control areas, ECA’s.”)
to it.\(^{12}\) Finland had acceded to MARPOL on 20\(^{th}\) September, 1983 and became legally bound by it from 2\(^{nd}\) October, 1983.\(^{13}\)

The MARPOL regime consists of a Convention and a Protocol, together with six Annexes, which deal with oil (Annex I), Noxious Liquid Substances carried in Bulk (Annex II), Harmful Substances carried in Packaged Form (Annex III), Sewage (Annex IV), Garbage (Annex V), and, most importantly from the perspective of this article, Air Pollution (Annex VI).\(^{14}\) Air pollution mentioned in Annex VI differs from that in other Annexes as it deals with air pollution caused in general from ships to all environmental mediums and does not exclusively confine to the harm caused by air pollution to the marine environment. Although Annex VI of the Convention had been adopted in 1997, it did not enter into force before 19\(^{th}\) May, 2005. Finland ratified Annex VI on 31\(^{st}\) March, 2005 and became a party to it on 30\(^{th}\) June, 2005.\(^{15}\) Yet, before the MARPOL Annex VI entered into force in 2005, the then EC had already adopted its own Sulphur Directive. In general, all parties to MARPOL are bound by

\(^{12}\) Marcus J. Kachel, *Particularly Sensitive Sea Areas: IMO’s Role in Protecting Vulnerable Marine Areas*, 13 HAMBURG STUD. MAR. AFF. 50-103, (2008), (provides a good overview of the MARPOL regime and the larger framework of oceans governance; particularly in chapters 4 and 5.)


\(^{14}\) UNTS, supra n.6 (the text of the original MARPOL Convention, with annexes and the Protocol of 1978 is provided therein).

Annexes I and II but they are free to choose to become parties to the other annexes.

A. The EU Sulphur Policy with Particular Emphasis on Sulphur Emissions from Ships

The Directive of 1999 was not primarily designed to implement Annex VI but constitutes a continuation of the earlier general policy against sulphur emissions from various sources by “imposing limits on the sulphur content of such fuels as a condition for their use within the territory of the Member States.” Thus, the Directive was based on a regulatory approach to influence the suppliers of fuels. The Directive of 1999 was based on an earlier Directive of 1993\(^\text{16}\), which sets the limits for the sulphur content of diesel and gas oils in the territory of the Member States of the EU. The Directive of 1993 did not apply to fuels “contained in the fuel tanks of vessels, aircraft or motor vehicles crossing a frontier between a third country and a Member State”\(^\text{17}\).

The prescribed limit under the Directive of 1999 did not apply to petroleum derived liquid fuels used by seagoing ships, except the fuels falling within the definition in Article 2(3). Interestingly, the EC (nowadays the European Union, EU) in the preamble paragraph 21, at this stage, already informed that it would align its regulatory system with that of Annex VI, which had just been adopted but would not come into force any time soon:

[W]hereas sulphur emissions from shipping due to the combustion of bunker fuels with a high sulphur content

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\(^{16}\) 1993 O.J. (L 74) 81, (“The directive relates to the sulphur content of certain liquid fuels.”)

\(^{17}\) Id. at Art.1 (2).
contribute to sulphur dioxide pollution and problems of acidification; whereas the Community will be advocating more effective protection of areas sensitive to SOx emissions and a reduction in the normal limit value for bunker fuel oil (from the present 4.5 %) at the continuing and future negotiations on the MARPOL Convention within the International Maritime Organisation (IMO); whereas the Community initiatives to have the North Sea/Channel declared a special low SOx emission control area should be continued.\textsuperscript{18}

The then EC also aimed to implement the Directive, as expressed in the preamble, in a way that would not cause too difficult technical and economic problems for certain Member States and their territories.\textsuperscript{19} This was regulated under Article 4 (2) of the Directive of 1999. Additional derogation was envisaged in Article 4 (3) of the Directive.\textsuperscript{20}

\textsuperscript{18} 1999 O.J. (L 121) 13, (hereinafter “Directive”) (“the Directive relates to a reduction in the sulphur content of certain liquid fuels and amending Directive 93/12/EEC”), http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31999L0032:EN:NOT.\textsuperscript{19} Id. at ¶ 20, (“Whereas the limit values of 0,2 % (from the year 2000) and of 0,1 % (from the year 2008) for the sulphur content of gas oils intended for marine use in sea-going ships may present technical and economic problems for Greece throughout its territory, for Spain with regard to the Canary Islands, for France with regard to the French Overseas Departments, and for Portugal with regard to the archipelagos of Madeira and Azores; whereas a derogation for Greece, the Canary Islands, the French Overseas Departments and the Archipelagos of Madeira and Azores should not have a negative effect upon the market in gas oil intended for marine use and given that exports of gas oil for marine use from Greece, the Canary Islands, the French Overseas Departments and the Archipelagos of Madeira and Azores to other Member States should satisfy the requirements in force in the importing Member State; whereas Greece, the Canary Islands, the French Overseas Departments and the Archipelagos of Madeira and Azores should therefore be afforded a derogation from the limit values of sulphur by weight for gas oil used for marine purposes”).\textsuperscript{20} Id. (“Provided that the air quality standards for sulphur dioxide laid down in Directive 80/779/EEC or in any Community legislation which repeals and replaces these standards and other relevant Community provisions are respected and the emissions do not contribute to critical loads being exceeded in any Member State, a Member State may authorise gas oil with a sulphur content between 0,10 and 0,20 % by mass to be used in part or the whole of its territory. Such authorisation shall apply only while emissions from
B. The Entry into Force of Annex VI and its Impact on the Sulphur Policy and Law of the EU

As noted above, although the Directive of 1999 did not focus only on air pollution policy of vessels, it made clear that the then EC would implement and follow closely the developments under Annex VI as it entered into force. Therefore, when Annex VI entered into force on 19th May, 2005, the legislative process of the EC had already been set in motion with the enacted Directive\textsuperscript{21} of 2005 and the Member States were required to bring it into force by 11th August, 2006. At this point, it is necessary to examine the regulatory scheme established by the original MARPOL Annex VI in 2005 and to compare it with the requirements prescribed by the Directive of 2005 to the Member States. Here, the main focus lies on examining how the regulatory system was supposed to function to curtail sulphur emissions from vessels in Sulphur Emission Control Areas (hereinafter “SECA”), such as the Baltic Sea.

The original MARPOL Annex VI defines SECA in Regulation 2(11) as “an area where the adoption of special mandatory measures for SOx emissions from ships is required to prevent, reduce and control air pollution from SOx and its attendant adverse impacts on land and sea areas. SOx Emission Control Areas shall include those listed in Regulation 14 of this Annex”. For any ocean-going vessel, the original MARPOL Annex VI prescribes that “The sulphur content of any fuel oil used on board ships shall not exceed 4.5% m/m” [45,000 parts per million (ppm)], placing a fairly relaxed global cap on fuel oil. The SECAs are regulated under

Regulation 14 (3), of which a) and b) paragraphs define Baltic Sea as a SECA and outline a procedure for designating new SECAs respectively. According to paragraph 14, 4 (a), the sulphur content of fuel “used on board ships in a sulphur emission control area shall not exceed 1.5% m/m” or, alternatively, the exhaust gas cleaning system has to be installed, which achieves approximately the same low sulphur emission level in SECA than using less heavier fuel oils [Art.14 (4b)] or, any other technological method achieving the same, as laid down in Article 14 (4c).

Since the vessels’ sulphur emission limits are very different in SECAs - (1.5%) than elsewhere (4.5%), there is a need to reflect upon for how a vessel, (if registered with a contracting party) using separate fuel oils, would switch its fuel oil service system to meet the stringent emission requirements after arriving at any SECA, as regulated in Article 14 (6). Annex VI aims at ensuring in many ways that these limits are met. All new ships are surveyed; they are required to carry an international pollution prevention certificate, which can be examined by the port authorities.\textsuperscript{22} The ships are also required to carry a bunker delivery note, which inter alia will show that the vessel is in compliance with the requirements in respect to sulphur content.\textsuperscript{23} The Annex under Regulation 18 also requires the contracting parties to keep a record of the local suppliers of fuel oil to ensure that the suppliers do not provide fuel oil that does not comply with the requirements of Annex VI. The main mode of enforcement under Annex VI is the Port State Control. The Port State authorities can inspect the incoming vessels on the basis of conditions laid


\textsuperscript{23} Id. at 28-30.
down in Regulation 10. And if they detect any violation of Annex VI, they are to inform the vessel’s flag state to take necessary actions.\textsuperscript{24}

The EU Directive of 2005 amending its predecessor builds partly on the Directive of 1999, and its emphasis on decreasing supply of heavy fuels, but it largely implements and in fact exceeds the standards of the MARPOL Annex VI. The limits on sulphur content for vessels operating in a SECA is the same, 1.5\% by mass, but it is meant to apply to “all vessels of all flags, including vessels whose journey began outside the Community.” This provision of the Directive applies to all vessels of all flags irrespective of whether or not the vessel’s flag state is a party to Annex VI. There are also other provisions that make the Directive regime more stringent than the Annex VI regime. Deviance from the MARPOL VI regime is contained in Article 4 (b): ships at berth in Community Ports, with effect from 1\textsuperscript{st} January, 2010, cannot use marine fuels with a sulphur content exceeding 0.1\% by mass. There is nothing of this kind in the MARPOL Annex VI. Moreover, it is the global MARPOL Annex VI regime that decides when and which areas are endorsed as SECAs. Yet, the Directive in its Article 4 (2b) prescribes its own timetables for the establishment of the North Sea SECA, an idea it also contemplated in the Directive of 1999:

For the North Sea:

— 12 months after entry into force of the IMO designation according to established procedures, or

— 11 August 2007,

whichever is the earlier.\textsuperscript{25}

\textsuperscript{24} Id. at Regulation no. 11.

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As these examples illustrate, even though the then EC had already stated in 1999 that it would align its regulatory efforts in respect of air pollution from ships with that of Annex VI of MARPOL, the Community, in its Directive of 2005, clearly exceeded the Annex VI standards\textsuperscript{26}, however it has to be noted that the new EU Commission Sulphur Directive does align the regime closer to the Annex VI regime.\textsuperscript{27}

There is also a very fragmented situation in terms of membership of Annex VI, given that not all Member States are parties to it and Malta became a party as late as on 30\textsuperscript{th} March, 2011 (with effect from 30\textsuperscript{th} June, 2011), and two Member States, Finland and Estonia, have opted out of the revised Annex VI under the possibility furnished by the tacit amendment procedure\textsuperscript{28} as cited in their communications.\textsuperscript{29} The Member States that

\textsuperscript{25} Directive, \textit{supra} n.18, (“Hence, even when IMO MEPC could not endorse the North Sea SECA, the EU had to establish it as such anyway latest by 11 August 2007. The MEPC adopted the North Sea as an SECA on 22 July 2005, which entered into force on 22 November 2006, becoming effective internationally from 22 November 2007. Apparently, the North Sea SECA was triggered in operation on the basis of the Directive on 11 August 2007, while for the contracting States of the Annex VI it became effective only on 22 November 2007. The Directive mandated all vessels to comply with the North Sea SECA during this transitional period, which was clearly in conflict with MARPOL Annex VI. For the Baltic Sea, both MARPOL Annex VI and the Directive had the same operational date i.e.11 August 2006.”)

\textsuperscript{26} See HENRIK RINGBOM, \textsc{THE EU MARITIME SAFETY POLICY AND INTERNATIONAL LAW} 427-37 (2008).

\textsuperscript{27} \textit{Infra} n.47, (“However it has to be noted that the new EU Commission Sulphur Directive proposal does align the regime closer to the Annex VI Regime.”)

\textsuperscript{28} See International Convention for the Prevention of Pollution from Ships (MARPOL), 2 November 1973, available at http://library.arcticportal.org/1699/1/marpol.pdf (“Under the original MARPOL 1973 Convention, Article 16, which the Protocol refers to (in Article VI), prescribes the amendment procedures for e.g. amendments of Annexes:(ii) an amendment to an Annex to the Convention shall be deemed to have been accepted in accordance with the procedure specified in subparagraph (f) (iii) unless the appropriate body, at the time of its adoption, determines that the amendment shall be deemed to have been accepted on the date on which it is accepted by two-thirds of the Parties, the combined merchant fleets of which constitute not less than fifty per cent of the gross tonnage of the world’s merchant fleet. Nevertheless, at any time before the entry into force of an amendment to an Annex to the Convention, a Party may notify the Secretary-General of the Organization that its express approval will be necessary before the amendment enters into force for it. The latter shall bring such notification and the date of
are not parties to Annex VI are all land-locked countries. Finland’s decision of opting out of the tacit amendment procedure was communicated on 22nd December, 2009 and it was as follows:

[T]he Embassy hereby informs, with reference to article 16(2)(f)(ii) and (iii) of the MARPOL Convention that, due to national procedural requirements, Finland is not able to accept the amendments before 1st January, 2010 and,

its receipt to the notice of Parties. (iii) an amendment to an Appendix to an Annex to the Convention shall be deemed to have been accepted at the end of a period to be determined by the appropriate body at the time of its adoption, which period shall be not less than ten months, unless within that period an objection is communicated to the Organization by not less than one-third of the Parties or by the Parties the combined merchant fleets of which constitute not less than fifty per cent of the gross tonnage of the world’s merchant fleet whichever condition is fulfilled”.

29 Status of Multilateral Conventions and Instruments in respect of which the International Maritime Organization or its Secretary-General Performs Depository or Other Functions 169, 7 November 2013 (hereinafter “Status of Multilateral Conventions and Instruments”) (“On 30 December 2009, the Depositary received the following communication from the Embassy of the Republic of Estonia: “In accordance with article 16(2)(f)(ii) of the international Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto, the Republic of Estonia notifies the Secretary-General that the express approval of the Republic of Estonia will be necessary before the amendments to the annex of the Protocol to amend the Convention adopted with the above mentioned resolution enter into force for it”).

30 Id. at 156-159. (“Non-parties of member states are: Austria, Czech Republic, Hungary and Slovakia. Parties from member states are Belgium (accession; date of entry into force 27 May 2006), Bulgaria (accession; date of entry into force 19 May 2005); Cyprus (accession; date of entry into force 19 May 2005); Denmark (ratification; date of entry into force 19 May 2005); Estonia (accession; date of entry into force 18 October 2005 (not party to the revised Annex VI); Finland (ratification; date of entry into force 30 June 2005 (not party to the revised); France (accession; date of entry into force 15 October 2005); Germany (accession; date of entry into force 19 May 2005); Greece (accession; date of entry into force 19 May 2005); Ireland (accession; date of entry into force 30 September 2009); Italy (accession; date of entry into force 22 August 2006); Latvia (accession; date of entry into force 19 September 2006); Lithuania (accession; date of entry into force 13 December 2005); Luxembourg (accession; date of entry into force 21 February 2006); Netherlands (acceptance; date of entry into force 2 January 2007); Poland (accession; date of entry into force 29 July 2005); Portugal (accession; date of entry into force 22 August 2008); Romania (accession; date of entry into force 25 April 2007); Slovenia (accession; date of entry into force 3 June 2006); Spain (accession; date of entry into force 19 May 2005); Sweden (signature; date of entry into force 19 May 2005); United Kingdom (accession; date of entry into force 19 May 2005).”)
therefore, an express approval will be necessary before the amendments enter into force for Finland.\textsuperscript{31}

\textbf{C. Comprehensive Amendments to Annex VI in 2008}

Comprehensive amendment to Annex VI was made in 2008. The Marine Environment Protection Committee (MEPC), which is one of the five Committees of the IMO, at its fifty eighth session, held in October 2008, adopted the amendments by resolution MEPC176(58).\textsuperscript{32} The MEPC, which consists of all Member States of the IMO, is empowered to consider any matter relating to adoption and amendment of conventions and other regulations. The MEPC made the amendment on the basis of the tacit amendment procedure outlined in Article 16(2)(f)(iii) of the Convention of 1973. The amendments were decided by consensus and designed by the tacit amendment procedure to be enforced on 1\textsuperscript{st} July, 2010 unless, prior to the date so fixed, not less than one-third of the Parties to the MARPOL 73/78 or the Parties, the combined merchant fleets of which constitute not less than fifty per cent of the gross tonnage of the world’s merchant fleet, notified the Organization of their objections to the amendments. It is worthy to compare the revised Annex VI of 2008 to the original one of 2005, particularly in the context of regulations on sulphur emission limits.

The original MARPOL Annex VI defines SECA in Regulation 2(11) as “an area where the adoption of special mandatory measures for SOx emissions from ships is required to prevent, reduce and control air pollution from SOx and its attendant adverse impacts on land and sea areas. SOx

\textsuperscript{31} \textit{Id.} at 159.
Emission Control Areas shall include those listed in Regulation 14 of this Annex. However, the revised Annex VI establishes Emission Control Area (ECA) wherein emission of substances besides sulphur can be controlled. The ECA is defined in the revised Annex VI as an area where the adoption of special mandatory measures for emissions from ships is required to prevent, reduce, and control air pollution from NOx or SOx and particulate matter or all three types of emissions and their attendant adverse impacts on human health and the environment.

For any ocean-going vessel, the original Annex VI prescribes that, “The sulphur content of any fuel oil used on board ships shall not exceed 4.5% m/m”. The revised Annex VI lays down in Article 14 (1) a time-table to reduce this limit as follows: “The sulphur content of any fuel oil used on board ships shall not exceed the following limits: 1) 4.50% m/m prior to 1st January, 2012; 2) 3.50% m/m on and after 1st January, 2012; and 3) 0.50% m/m on and after 1st January 2020.”

The SECAs are regulated under Regulation 14 (3) in the original Annex VI, of which clause (a) defines the Baltic Sea as one SECA while clause (b) prescribes the requirements and the procedures for designating new SECAs. According to paragraph 4 (a), the sulphur content of fuel “used on board ships in a SECA does not exceed 1.5% m/m” or, alternatively, the exhaust gas cleaning system has to be installed, which achieves approximately the same low sulphur emission level in SECA area than using less heavier fuel oils”. The revised Annex VI enables the establishment of Emission Control Areas (ECAs), in Regulation 14 (3) not only for sulphur oxides but nitrate oxides and particulate matter or, for all

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33 UNTS, supra n.6.
34 Annex VI, supra n.32.
of them. While designating the North Sea as an ECA, the revised Annex VI also places a time-table for reducing the sulphur content of fuel oil by vessels operating within such ECAs. Therefore, “the sulphur content of fuel oil used on board ships shall not exceed the following limits”:

1) 1.50% m/m prior to 1st July, 2010;
2) 1.00% m/m on and after 1st July, 2010; and
3) 0.10% m/m on and after 1st January, 2015.

There are also special rules to ensure that the vessels that use different fuel oils within and without ECA make the change effectively as they enter the ECA. They are specifically required to “carry a written procedure showing how the fuel oil change-over is to be done”\textsuperscript{35}.

1. Role of HELCOM with the adoption of Revisions to the Annex VI

The nine littoral countries of the Baltic Sea also have taken action under the auspices of the Baltic Marine Environment Protection Commission i.e., the Helsinki Commission (HELCOM) on air pollution from ships. By means of the HELCOM Baltic Sea Action Plan, adopted on 15\textsuperscript{th} November, 2007 in Krakow, Poland, by the HELCOM Extraordinary Ministerial Meeting, including representatives from all the Baltic Sea littoral States and the European Commission, the countries prepared a joint submission to the IMO. It is noteworthy that the HELCOM Baltic Sea Action Plan includes commitments made by the HELCOM countries and those by the Commission to strengthen the SECA in the Baltic Sea. In 2007 HELCOM

\textsuperscript{35} Id. Regulation 14 (6) of the revised Annex VI.
states committed to strengthen the Annex VI regime in the Marine Environmental Protection Committee of the IMO and affirmed as follows:

[W]E ACKNOWLEDGE the serious impact on the particularly sensitive Baltic Sea ecosystem from regional, and due to the trans-boundary character of air emissions, also global shipping activities. Therefore, WE AGREE to support efforts within IMO under the ongoing review process of Annex VI of MARPOL 73/78 to tighten sulphur content in fuel oil at the global level, by having a joint submission to IMO as contained on page 99 by 25th January, 2008 prior to MEPC 57 in April 2008, with the aim of addressing also the regional component of the issue...37

This submission was done on behalf of all Baltic Sea littoral states to the 57 MEPC under the title “A need to further address SOx emissions from shipping.” The submission preceded the adoption of the amendments to Annex VI in MEPC 58. This submission by the Baltic States discussed the implementation of Regulation 14 (4) concerning the limit of sulphur content of fuel oil used on board ships in the Baltic Sea SECA, which came into effect from 19th May, 2006, and stated the following:

Before the regulation came into force there were several concerns regarding availability of low sulphur fuel oil and possible consequences for the enforcement of the regulations and economic impacts. However, the experience gained with the implementation and enforcement of relevant regulations in the HELCOM area has been mostly positive...From the encouraging experience gained so far it can be concluded that even more ambitious aims concerning fuel oil quality

are achievable globally as well as regionally within the next years.\textsuperscript{38}

If all the aforementioned developments are considered, it may seem surprising that all Baltic Sea littoral states were not ready to accept the revised Annex VI in the first instance. Estonia and Finland objected to the amendments to Annex VI within the set time-frame under the tacit amendment procedure and, as a result, the amendments became binding on all the littoral states of the Baltic Sea but Estonia and Finland. Also, the Russian Federation finally became a party to the revised Annex VI on 8th July, 2011.\textsuperscript{39}

\textit{Will the EU Revise Its Own Regulatory Framework in the light of the Revised Annex VI} – In 2005, when the EC adopted its new Directive, it confirmed that it wanted to progress in the IMO commitments on Annex VI. In the 15th preamble paragraph the EC states that, “It is essential to reinforce Member States' positions in IMO negotiations, in particular to promote, in the revision phase of Annex VI to MARPOL, the consideration of more ambitious measures as regards tighter sulphur limits for heavy fuel oils used by ships and the use of equivalent alternative emission abatement measures”\textsuperscript{40}. The European Commission hereunder made clear during the negotiations of what became the revised Annex VI that the Community would act alone if global standards proved too difficult to attain:

\textsuperscript{38} See \textit{Input paper by the Baltic Sea States to IMO on a Need to Further Address SOx Emissions from Shipping}, Baltic Marine Environment Protection Commission, \textit{available at} http://www.helcom.fi/BSAP/ActionPlan/otherDocs/en_GB/InputIMO.

\textsuperscript{39} Status of Multilateral Conventions and Instruments, supra n.29 at 167, \textit{available at} http://www.imo.org/About/Conventions/StatusOfConventions/Documents/Status%20-%202011.pdf.

\textsuperscript{40} See supra n.20, ¶ 15 of the preamble.
The observer of the European Commission reiterated the Commission’s strong preference for global solutions, as may be agreed by IMO, with the objective of reducing air pollution and greenhouse gas emissions from ships. On both issues the Commission had always clearly indicated that it would await IMO action, in accordance with the timelines already established by the Organization, for the necessary global mandatory measures to be developed and adopted. The European Commission was, therefore, fully in line with IMO on the work being carried out and, while significant progress needed to be made during 2008, its position had not changed. However, should it not be possible for the Organization to maintain the established timelines, the Commission retained the right to initiate appropriate action to protect the environment.41

In the same meeting, the EU presidency pronounced the following:

Slovenia, speaking as the Presidency of the European Union, following consultations with the European Commission and fellow EU Member States, wholeheartedly congratulated the IMO community, that was, all Member States, observers, the IMO Secretariat and the Secretary-General personally, for this tremendous achievement. The measures approved by the Committee would significantly and quickly reduce air pollution from ships, offering benefits for the environment and humans in the entire world. In particular, Slovenia acknowledged and greatly appreciated the co-operation and flexibility showed by all Member States and involved observers enabling IMO to reach this important decision. It clearly demonstrated that IMO was capable of taking important and difficult decisions to protect the environment. Slovenia hoped that this spirit should be maintained for all other environment-related issues and would lead to similar positive results on greenhouse gas issues and ship recycling in 2009 as well as on other matters.42

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42 Id. at ¶ 4.62.
Since the negotiations in IMO were quite advanced in respect of Annex VI, as testified by the fact that even most environmental NGOs were satisfied, the Commission is now in the process to revise the Directive of 2005 to correspond to the revised Annex VI. This is also urged by the EU co-legislators, both the Council of Ministers and the EU Parliament.\textsuperscript{43} In 2011 the Commission came up with a proposal for a new Directive,\textsuperscript{44} which aligns the Directive regime more closely with Annex VI regime.

II. FINNISH LEGAL RULES AND THE BASIS OF THEIR OBSERVATION

A. Analysis from the Perspective of International Law

From the perspective of international law the situation is clear. Finland is not legally bound by the amendments to Annex VI, but it needs to implement the requirements prescribed in the original Annex VI in the marine areas of the Baltic Sea under its jurisdiction and control. The same applies to Estonia.

The other coastal states of the Baltic Sea SECA are bound to implement the requirements of revised Annex VI as they did not object to the amendments in due course. If one of these states, in theoretical terms, shall have to withdraw from the revised Annex VI, they would have to follow the procedure established in the original Annex VI, which provides the following in Article 7:

\begin{itemize}
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1. The present Protocol may be denounced by any Party to the present Protocol at any time after the expiry of five years from the date on which the Protocol enters into force for that Party.

2. Denunciation shall be effected by the deposit of an instrument of denunciation with the Secretary-General.

3. A denunciation shall take effect twelve months after receipt of the notification by the Secretary-General or after the expiry of any other longer period which may be indicated in the notification.

4. A denunciation of the 1978 Protocol in accordance with Article VII thereof shall be deemed to include a denunciation of the present Protocol in accordance with this Article. Such denunciation shall take effect on the date on which denunciation of the 1978 Protocol takes effect in accordance with Article VII of that Protocol.

In other words, the states shall not be able to denounce only the revised Annex VI, as Finland and Estonia did, but they shall have to denounce Annex VI as a whole. This type of choice for these states seems highly unfavourable, given that all these States are members of the EU and are bound by the Sulphur Directive of 2005, which sets similar and, to some extent, higher standards than the original Annex VI.

The regulatory framework in the Baltic Sea SECA seems significantly fragmented if examined from the perspective of international law. Finland and Estonia are not bound by the requirements of the revised Annex of 2008. The other coastal states of the Baltic Sea are obligated to ensure that in SECA/ECA under their jurisdiction and particularly in their ports, the other contracting States' vessels live up to the sulphur content of fuel oil used on board ships shall not exceed the limit (on and after the 1st July, 2010) 1.00% m/m and 0.10% m/m on and after 1st January, 2015. Finland
and Estonia are obligated to make sure in their SECAs that the sulphur content of fuel used on board ships does not exceed 1.5% m/m. In the Gulf of Bothnia, Sweden is bound by revised Annex VI whereas Finland by original Annex VI. Yet, this status is further complicated by the influence of the EU law.

**B. Analysis from the Perspective of the Law of the European Union**

The law of the EU is an independent legal order that functions within the general realm of international law. It is a stringent and an elaborate legal system. It may once again be reiterated at this point that the EU’s Sulphur Directive exceeds the global standards laid down by MARPOL Annex VI. In terms of shipping regulation, regional or local standards are normally decried, given that the global nature of shipping and the concomitant need to have uniform global rules. The UN Convention on the Law of the Sea (LOS Convention), also known as the Constitution of the Oceans, puts special emphasis on freedom of navigation and, therefore, refers matters relating to the regulation of shipping to a competent international organization, the IMO. Therefore, the additional obligations introduced by the Sulphur Directive of 2005 of the EU exceeds the obligations laid down by the original MARPOL Annex VI of 2005 and raises issues related to freedom of navigation. It remains doubtful as to whether or not the EU is competent to adopt such rules.

1. **EU’s Competence in Regulating More Stringent Air Pollution Rules**

EEC/EC/EU has been trying to become a member of the IMO for quite some time, but to no avail. Therefrom, it can be ascertained that the international conventions brought to effect under the auspices of the IMO
and its subsidiary bodies become binding only on sovereign states serving no scope for any international institution to be a part of it. The ECJ had examined in the case of *Peralta* whether or not MARPOL could be binding on any Community and stated as follows:

> In so far as the Italian court raises the question of the compatibility of the Italian legislation with the MARPOL Convention, it is sufficient to find that the Community is not a party to that convention. Moreover, it does not appear that the Community has assumed, under the EEC Treaty, the powers previously exercised by the Member States in the field to which that convention applies nor, consequently, that its provisions have the effect of binding the Community.\(^{45}\)

In a more recent *Intertanko* case\(^{46}\), referred by the High Court of Justice of England and Wales to the European Court of Justice (ECJ, nowadays Court of Justice of the European Union CJEU), the Court adjudicated on whether or not the MARPOL Annex VI is binding on the EU and, if it is, then, to what extent. The tanker owners association and other interveners argued that the EC had exceeded the standards of Annex I of MARPOL while enacting its own Directives relating to certain aspects of that Annex. The issue is much alike the one posited herein, given that the Sulphur Directive of 2005 exceeded the original Annex VI of 2005. The ECJ affirmed that the EU is not legally bound by the MARPOL Annex I and that the UN Convention on the Law of the Sea is a part of the EU legal order and further stated that:


In those circumstances, it is clear that the validity of Directive 2005/35 cannot be assessed in the light of MARPOL 73/78, even though it binds the Member States. The latter fact is, however, liable to have consequences for the interpretation of, first, UNCLOS and second, the provisions of secondary law which fall within the field of application of MARPOL 73/78. In view of the customary principle of good faith, which forms part of general international law, and of Article 10 EC, it is incumbent upon the Court to interpret those provisions taking account of MARPOL 73/78. Thus, the Court tacitly suggests here, that even though MARPOL Annex I does not bind the EU (resulting in that the EU is not bound to conform to the provisions of MARPOL), the MARPOL still has the authority to exercise influence on the legislative activity of the EU. The Court further observed that although the Directive should not be strictly speaking assessed in the light of MARPOL, its provisions should still be taken into account. In the light of the above observation of the ECJ, it is safe to conclude that when the Commission is to legislate on any matter relating to the aspects of Annex VI, it must take into account the MARPOL Annex VI regulatory scheme.

Further, that the Sulphur Directive of 2005 clearly prescribed the limits on sulphur content, i.e., maximum cap on heavy fuel oils used in their territory, over ships at berth, and, most importantly, over SECAs, it can fairly be inferred that the EU is competent to regulate the limits over SECAs and ECAs.

**CONCLUSION**

In the light of the above observations, the final question that needs to be addressed is, if Finland is required to observe international and European Law on the limits on emission of sulphur oxide from ships in the Baltic Sea SECA. It is clear that within the ambit of international law, neither the EU nor Finland is obligated to implement the revised Annex VI of MARPOL.
Finland is required to implement the original MARPOL Annex VI in its domestic plane and ensure, thereupon, that vessels of all contracting States of MARPOL Annex VI observe them, in particular the 1.5% limit on sulphur emission in the Baltic Sea SECA. This can mainly be enforced by Finland by means of port inspections. Finland is also obligated to observe the EU's 2005 Sulphur Directive, which prescribes stricter obligations on all Member States than the original MARPOL Annex VI, given that the latter requires the ships at berth to follow the limit of 0.1% sulphur content. A fragmented situation appears when certain parts of the Directive of 2005 are not in line with the LOS Convention and customary law of the sea. However, it may be supposed that, since the LOS Convention is superior to secondary legislation in the EU law, the Directive must be interpreted in conformity with limited enforcement powers given to port especially to coastal states under the LOS Convention. The EU is essentially required to take into account the provisions of MARPOL Annex VI and its revisions for designing its new regulation relating to sulphur even though the ECJ (now the CJEU) has not directly adjudicated upon this. It is worth mentioning at this point that the Commission, in its new proposal for Sulphur Directive, has conformed to the revised Annex VI.

Finland is currently trying to get an exemption from the revised Sulphur Directive recently promulgated by the Commission. The industry perceives of the strict limit on sulphur emission in the Baltic Sea SECA as a serious problem as most of their goods are transported via ships to various

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destinations, that is, via the Baltic Sea SECA. The sea ice conditions in winter, for example, pose enormous financial challenges for the industries in Finland if the country conforms to the sulphur regime proposed by the Commission on 15\textsuperscript{th} July, 2011. This is because, goods are mostly being transported by ships at present, but in order to conform to the revised limits on sulphur emission prescribed by the Commission, soon they might have to be carried by some other means of transportation, mostly by trucks, which, according to the industry, will cause more air pollution.\textsuperscript{48} The Commission, in its impact assessment, does not accept these calculations but suggests certain ways to overcome this problem.\textsuperscript{49} The vulnerable state of many ecosystems within the environment of the Baltic Sea and the need thereof to take adequate action by all the littoral states of the region must be considered.

As expounded above, Finland currently follows two strategies that point to different directions. Together with other Baltic Sea states, Finland has been advocating stricter measures for sulphur emissions from ships. On the other hand, Finland opted out of the revisions of Annex VI of 2008 as the revisions are likely to impose heavy costs on Finnish industry.

These two conflicting policy objectives crop up in the official plan recently approved by the Finnish Government for its future work. This, of course, is nothing new. It is clear that different ministries have different goals and values that many a time point to different directions, such as, in this case environmental protection of the Baltic Sea and securing the economically competitive transport routes for the Finnish industry. But now, when the

\textsuperscript{49} Id. at ANNEX VIII: Current and Potential Future Support Measures that could be used for the Implementation of MARPOL ANNEX VI, pp. 77-83.
Russian Federation has also become a full party to Annex VI, it does seem difficult for Finland to maintain its “exemption” policy in a politically viable manner.

In many ways it seems that the Finnish agenda of obtaining exemption from the sulphur legislation of the EU was already lost before the game commenced. There seems to be no clear-cut legal case for Finland to receive an exemption from the forthcoming legislation of the EU, especially because previous Sulphur Directives have not accorded exemptions, but for minor reasons.\textsuperscript{50} Moreover, given the limited

\textsuperscript{50} “The 1999 EEC Sulphur directive provided clear-cut exemptions, the first one applicable to only certain regions and member States and the second potentially to all member States. As expressed in the preambular paragraph 20 of the 1999 Sulphur Directive, the Directive needs to be implemented in a way that would not cause too difficult technical and economic problems for certain member States and their territories”. “Whereas the limit values of 0.2 % (from the year 2000) and of 0.1 % (from the year 2008) for the sulphur content of gas oils intended for marine use in sea-going ships may present technical and economic problems for Greece throughout its territory, for Spain with regard to the Canary Islands, for France with regard to the French Overseas Departments, and for Portugal with regard to the archipelagoes of Madeira and Azores; whereas a derogation for Greece, the Canary Islands, the French Overseas Departments and the Archipelagoes of Madeira and Azores should not have a negative effect upon the market in gas oil intended for marine use and given that exports of gas oil for marine use from Greece, the Canary Islands, the French Overseas Departments and the Archipelagoes of Madeira and Azores to other Member States should satisfy the requirements in force in the importing Member State; whereas Greece, the Canary Islands, the French Overseas Departments and the Archipelagoes of Madeira and Azores should therefore be afforded a derogation from the limit values of sulphur by weight for gas oil used for marine purposes”. This is regulated in Article 4 (2) of the 1999 Directive. Additional derogation is envisaged in Article 4 (3) of the 1999 sulphur Directive: “Provided that the air quality standards for sulphur dioxide laid down in Directive 80/779/EEC or in any Community legislation which repeals and replaces these standards and other relevant Community provisions are respected and the emissions do not contribute to critical loads being exceeded in any Member State, a Member State may authorise gas oil with a sulphur content between 0.10 and 0.20 % by mass to be used in part or the whole of its territory. Such authorisation shall apply only while emissions from a Member State do not contribute to critical loads being exceeded in any Member State and shall not extend beyond 1 January 2013”. These are both interesting examples, but they were part of a different regulatory scheme than that adopted in 2005, which directly addressed air pollution from ships. Given that the Annex VI as it was originally adopted in 1997 and entered into force in 2005 was not seen as meeting the requirements to curb the air pollution from ships to a tolerable level, (resulting in very speedy amendment
exemptions that have been accorded in the Sulphur Directives, the political viability of obtaining such an exemption seems slim indeed. The best strategy for Finland now is to continue to act as one of the main littoral states of the Baltic Sea and attempt to restore the degraded environment of the Baltic Sea. It has had this pioneering role for a long time within the framework of the Helsinki Commission and at the domestic plane, a stewardship role that includes firm action to curtail air pollution in Baltic Sea environment.