



IMO
INTERNATIONAL MARITIME LAW INSTITUTE
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**A LAW TO INCORPORATE THE INTERNATIONAL
CONVENTION ON THE CONTROL OF HARMFUL
ANTI-FOULING SYSTEMS ON SHIPS, 2001 INTO
THE LAWS OF UKRAINE AND TO PROVIDE FOR
THE EFFECTIVE IMPLEMENTATION THEREOF**

**A legislation Drafting Project submitted in partial fulfilment of the
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cm²	square centimetre
g	gram
kg	kilogram
km	kilometre
km²	square kilometre
m	metre
m²	square metre
mcg	microgram
mg/m³	microgram per cubic meter
mt	metric ton
µg/kg	microgram per kilogram

TABLE OF ABBREVIATIONS

AFS Convention	International Convention on the Control of Harmful Anti-fouling Systems on Ships
IMO	International Maritime Organization
MEPC	Marine Environment Protection Committee of IMO
TBT	Tributyltin

EXPLANATORY NOTE

Introduction

The sea, the world ocean, or simply the ocean, is the connected body of salty water that covers over 70% of the Earth's surface. It moderates the Earth's climate and has important roles in the water cycle, carbon cycle, and nitrogen cycle.¹

A wide variety of organisms, including bacteria, protists, algae, plants, fungi and animals live in the sea, which offers an extensive range of marine habitats and ecosystems, spreading vertically from the sunlit surface waters and the shoreline to the enormous depths and pressures of the cold, dark abyssal zone, and in latitude from the cold waters under the Arctic ice to the colourful diversity of coral reefs in tropical regions. Many of the major groups of organisms evolved in the sea and life may have started there.²

The sea provides substantial supplies of food for humans, mainly fish, but also shellfish, mammals and seaweed, whether caught by fishermen or farmed underwater. Other human uses of the sea include trade, travel, mineral extraction, power generation, warfare, and leisure activities such as swimming, sailing and scuba diving.³

The oceans make our blue planet unique in our solar system — and not just visually. They help regulate the global climate and are the ultimate source of the water that sustains all life on Earth, from coral reefs to snow-covered mountains, from tropical rain forests to mighty rivers and even deserts. However, the ability of the oceans to provide their essential services is being threatened by climate change, pollution and unsustainable use.⁴

Therefore, it seems clear that the sea itself, and taking care of the healthy sea environment in particular, should be vital priority of all the human kind, because the people's dependence on the sea is inexpressible. Accordingly, the goal of this project is to implement the International Convention on the Control of Harmful Anti-fouling Systems on Ships (hereinafter – “Convention” or “AFS Convention”),⁵ which is an

¹ Hilde Widerberg, *You Sea* (Createspace Independent Publishing Platform 2014).

² Ibid.

³ Ibid.

⁴ United Nations Secretary-General, ‘Marking World Oceans Day, Secretary-General Urges All to Do Their Part in Reducing Plastic Pollution’ (8 June 2018) <<https://www.un.org/press/en/2018/sgsm19077.doc.htm>> accessed 2 January 2019.

⁵ International Convention on the Control of Harmful Anti-fouling Systems on Ships, 2001: London, 5 October 2001’ (Treaty series no. 13 (2012), Stationery Office 2012).

important step towards global protection of the marine environment, into the legislation of one of the biggest European countries, namely Ukraine.

I. BACKGROUND FOR THE DEVELOPING OF ANTI-FOULING SYSTEMS CONVENTION

1.1. Ship-fouling

Ships travel faster through water and consume less fuel when their hulls are clean and smooth – free from fouling. Fouling is an unwanted growth of biological material - such as barnacles, molluscs and algae - on a surface immersed in water.⁶

Vessel bottoms not protected by anti-fouling systems may gather 150 kg of fouling per m² in less than six months of being at sea. On a Very Large Crude Carrier with 40,000 m² underwater areas, this would add up to 6,000 mt of fouling.⁷

Just a small amount of fouling can lead to an increase of fuel consumption of up to 40%, and possibly as much as 50%, since the resistance to movement will be increased. A clean ship can sail faster and with less energy.⁸

An effective anti-fouling system can save a shipowner money in a number of ways:⁹

- Direct fuel savings by keeping the hull free of fouling organisms;
- Extended dry-docking interval, when the anti-fouling system provides several years of use;
- Increased vessel availability - since it does not have to spend so much time in dry dock.

Moreover, it has to be emphasized that extra consumption of fuel causes extra ejection of carbon dioxide and other chemicals into the air, as well as fuel residues into the ocean.

⁶ International Maritime Organization, 'Anti-fouling systems' (2002)
<<http://www.imo.org/en/OurWork/Environment/Anti-foulingSystems/Documents/FOULING2003.pdf>>
accessed 2 January 2019

⁷ Ibid.

⁸ Ibid.

⁹ Ibid.

Thus, it is obvious that the volume of fouling influence on shipping is quite big, not only in commercial aspect, but also in respect of environmental protection. In such circumstances, humans had no alternative than to react and try to solve the issue in the most affordable way.

1.2. Anti-fouling systems

From a historical perspective, anti-fouling actions were a necessity all the time. However, two hundred years ago there were no systems that could be considered as anti-fouling. That is why, in order to avoid a high decrease of the speed and an extra weight of the vessels some special actions had to be performed. The most commonly applied operation, which is still in use is careening.¹⁰

Careening is mooring a boat in the shallows so that when the tide falls the boat is left high and dry, for the purpose of cleaning and repairing the bottom. This is usually done in order to expose one side or another of the ship's hull for maintenance and repairs below the water line when the tide goes out.¹¹ This practice is also known as to “heaving down”. Today, only small vessels are careened, while large vessels are placed in dry dock.¹²

A related practice was a kind of careening called “parliamentary heel”, in which the vessel was heeled over in deep water by shifting weight, such as ballast or guns, to one side. In this way, the upper sides could be cleaned or repaired with minimal delay.¹³

It is clear that vessels have been growing in size and weight for years and now it is impossible to handle careening for the large vessels.

In parallel, in the early days of sailing ships, lime and later arsenical and mercurial compounds and pesticides were used to coat ships' hulls to act as anti-fouling systems. During the 1960s the chemicals industry developed efficacious and cost-effective anti-fouling paints using metallic compounds, in particular the organotin compound tributyltin (TBT). By the 1970s, most seagoing vessels had TBT painted on their hulls.

¹⁰ Educalingo, ‘Online dictionary’ <<https://educalingo.com/en/dic-en/careen>> accessed 2 January 2019

¹¹ Mike MacKenzie, *Seatalk, The Dictionary of English Nautical Language* (www.seatalk.info, keyword (careen), 2005).

¹² Educalingo (n 11).

¹³ Ibid.

1.3. TBT – the problem

With the early organotin-based anti-fouling paints, the active ingredients were dispersed in the resinous matrix - the “paint” - from which they “leached” into the seawater, killing barnacles and other marine life that had attached to the ship. But the release rate for the biocide in these “free association” paints was uncontrolled and tended to be rapid initially, with the effect wearing off in 18 to 24 months as the biocide leached out of the paint.¹⁴ For instance, because of its anti-fouling efficacy, TBT was also used extensively on the netting of sea cages in mariculture of salmon and it appeared, that TBT release in newly painted salmon cages was recorded 1 mg/m³, 0.1 mg/m³ and 0.005 mg/m³ after 1 day, 2 weeks and 5 months respectively. Similarly, other research reported TBT concentrations from 0.007 to 0.026 mg/m³ in treated salmon pens in the United States.¹⁵

However, it soon became clear there was a price to pay for the efficient anti-fouling paints containing TBT. Environmental studies provided evidence that organotin compounds persist in the water and in sediments, killing sea life other than that attached to the hulls of ships and possibly entering the food chain. Specifically, TBT was shown to cause shell deformations in oysters; sex changes (imposex) in whelks; and immune response, neurotoxic and genetic affects in other marine species.¹⁶ For example, behavioural abnormalities and pathological changes occurred in farmed Atlantic salmon that were transferred to a newly antifouled cage and feeding responses were dramatically reduced after four days. Salmon show lifting of the gill epithelium, an increase in the number of leucocytes in the retina, and a lens that was opaque inferring blindness. After seven weeks exposure hyperplasia was observed in the dermal layers of the skin, resulting in protruding scales, especially along the lateral line. These observations were interpreted as TBT interfering directly with the normal growth of salmon.¹⁷

TBT has been described as the most toxic substance ever deliberately introduced into the marine environment. Used as a fungicide, bactericide, insecticide and wood preservative, it is known to be harmful to a range of aquatic organism, including microalgae, molluscs and crustaceans, fish and some invertebrates.¹⁸

¹⁴ IMO (n 5).

¹⁵ Claire Hellio and Diego Yebra, *Advances in marine antifouling coatings and technologies* (Woodhead publishing in materials, Woodhead 2009).

¹⁶ IMO (n 5).

¹⁷ Hellio and Yebra (n 15).

¹⁸ IMO (n 5).

As TBT began to be widely used in anti-fouling paints, scientists began to find increasingly high concentrations of TBT in areas with high concentrations of boats and ships, such as marinas, ports and harbours. In the open seas and oceanic waters, TBT contamination was seen as less of a problem, although later studies showed evidence of TBT accumulation in fish and mammals. Scientists first found evidence of TBT contamination in oysters. In Arcachon Bay, on the west coast of France, TBT contamination from boats was linked in the 1970s to high mortalities of oyster larvae and such severe malformations of the shells of adults that they were unmarketable.¹⁹

In south-west England, TBT poisoning was linked to the decline of the population of the dog whelk (*Nucella lapillus*) in the 1980s. Studies showed that female dog whelks develop the condition known as imposex in response to TBT poisoning: females develop male sexual organs and the female can become sterile.

Given the possibility to bioaccumulate TBT was able to enter the human food chain, where it is toxic to humans. The World Health Organization (WHO) has set a limit of 3.2 µg/kg body weight for tin in humans, which corresponds to a daily consumption of 150 g salmon for a 70 kg person.²⁰ These numbers obviously show that consumption of a few amount of seafood may lead to TBT over-concentration in human bodies. Considering the TBT effect on dog whelk, it may be assumed, that its effect on humans may be severe and unpredictable.

In the 1980s, high concentrations of TBT were reported in coastal areas around the world.²¹

1.4. International community reaction

In response to the abovementioned threats, a number of countries introduced controls to limit the use of TBT in anti-fouling paint on small vessels. France prohibited the use of TBT-based paints on vessels less than 25 m in length in 1982 and other countries followed suit, including Japan, which imposed strict regulations on the use of TBT in anti-fouling paints in 1990 and prohibited the production of such paints in 1997.²²

The pollution problems caused by TBT in anti-fouling paints were first raised at IMO's Marine Environment Protection Committee (MEPC) in 1988, when the Paris

¹⁹ IMO (n 6).

²⁰ Hellio and Yebra (n 15).

²¹ IMO (n 5).

²² IMO (n 6).

Commission requested IMO to consider the need for measures under relevant legal instruments to restrict the use of TBT compounds on seagoing vessels.²³

By this time there was unequivocal evidence worldwide that TBT and other organotin compounds were harmful to aquatic organisms - and several countries had already, individually or under regional agreements, adopted measures to reduce the harmful effects of the use of TBT based anti-fouling paints. It was clear, however, that international measures to regulate the use of anti-fouling systems would need to be developed and in April 1990, the Third International Organotin Symposium held in Monaco recognized that the IMO was the appropriate body to do this.²⁴

In 1990, at its 30th session, the MEPC adopted Resolution MEPC 46(30) on Measures to Control Potential Adverse Impacts Associated with Use of Tributyltin Compounds in Anti-Fouling Paints.²⁵

This resolution recommends that Governments adopt measures to eliminate the use of anti-fouling paint containing TBT on non-aluminium hulled vessels of less than 25 m in length and eliminate the use of anti-fouling paints with an average leaching rate of more than 4 mcg of TBT per cm² per day.

These recommendations were intended to be interim measures until IMO could consider a possible total prohibition of TBT compounds in anti-fouling paints for ships.²⁶

Finally, the diplomatic conference held from the 1 to 5 October 2001 adopted the new AFS Convention.²⁷

²³ Ibid.

²⁴ Ibid.

²⁵ Resolution MEPC 46(30) on Measures to Control Potential Adverse Impacts Associated with Use of Tributyltin Compounds in Anti-Fouling Paints 1990.

²⁶ IMO (n 6).

²⁷ The Conference also adopted the following resolutions: Resolution 1 – “*Early and effective application of the International Convention on the Control of Harmful Anti-fouling Systems on Ships*”; Resolution 2 – “*Future work by the organization pertaining to the international convention on the control of harmful anti-fouling systems on ships*”; Resolution 3 – “*Approval and test methodologies for anti-fouling systems on ships*”; Resolution 4 – “*Promotion of technical co-operation*”.

II. AFS CONVENTION

AFS Convention was adopted on 5 October 2001 and entered into force on 17 September 2008.

Under the terms of the AFS Convention, Parties to the Convention are required to prohibit and/or restrict the use of harmful anti-fouling systems on ships flying their flag, as well as ships not entitled to fly their flag but which operate under their authority and all ships that enter a port, shipyard or offshore terminal of a Party. The last provision logically constitutes the establishment of “no more favourable treatment” principle for the Convention’s scope of application.

Anti-fouling systems to be prohibited or controlled are listed in an annex to the Convention, which will be updated as and when necessary.

The Convention provides for the establishment of a “technical group”, to include people with relevant expertise, to review proposals for other substances used in anti-fouling systems to be prohibited or restricted. Article 6 on Process for Proposing Amendments to controls on Anti-fouling systems sets out how the evaluation of an anti-fouling system should be carried out.²⁸

As at 3 April 2019, the Convention has been ratified or acceded to by 85 States, the combined merchant fleets of which constitute approximately 95.96% of the gross tonnage of the world’s merchant fleet.²⁹

2.1. Structure

The Convention consists of a preamble, 21 articles and 4 annexes, which might be divided into the following groups:

- a) General provisions, which include articles 1, 2, 3, 15;
- b) State control provisions, specified in articles 4, 5, 10, 11;
- c) Amendment provisions (articles 6, 7, 16);

²⁸ IMO, ‘International Convention on the Control of Harmful Anti-fouling Systems on Ships’ <[http://www.imo.org/en/About/Conventions/ListOfConventions/Pages/International-Convention-on-the-Control-of-Harmful-Anti-fouling-Systems-on-Ships-\(AFS\).aspx](http://www.imo.org/en/About/Conventions/ListOfConventions/Pages/International-Convention-on-the-Control-of-Harmful-Anti-fouling-Systems-on-Ships-(AFS).aspx)> accessed 3 January 2019.

²⁹ IMO, ‘Comprehensive information on the status of multilateral Conventions and instruments in respect of which the International Maritime Organization or its Secretary-General performs depositary or other functions’ (21 February 2019) <<http://www.imo.org/en/About/Conventions/StatusOfConventions/Documents/Status%20-%202019.pdf>> accessed 1 March 2019.

- d) Cooperation provisions (articles 8, 9);
- e) Violations (articles 12, 13);
- f) Final provisions (articles 14, 17-21);
- g) Annexes.

General provisions regulate issues of general obligations, definitions, application of the Convention and its relationship to International Law of the Sea.

State control provisions correspond to the power of State Parties to handle control over the vessels to which the Convention is applicable, to have the authority for survey and certification of anti-fouling systems, to inspect the vessels and detect the violations of the Convention.

Amendment provisions specify the procedure of proposing amendments to controls on anti-fouling systems, regulate the establishment and work of technical groups and the process of amendments' entry into force.

Cooperation provisions oblige Parties to the Convention to promote and facilitate scientific and technical research on the effects of anti-fouling systems as well as monitoring such effects and exchanging with the IMO and States the received information, as well as information in regard of the nominated surveyors and recognized organizations which are authorized to act on behalf of that Party in the administrations of matters concerned in the Convention.

Articles on violations establish the general procedural rules for investigating the alleged violations, taking actions in respect of them and establishing sanctions therefor. This part of the Convention includes a clause which states that a ship shall be entitled to compensation if it is unduly detained or delayed while undergoing inspection for possible violations of the Convention.

Final provisions include the adoption of the Convention, its entry into force and denunciation procedure, establish the depositary and the official languages of the Convention, and also include the dispute resolution order.

Annexes provide further detail on the following:

- i) Annex 1 states that all ships shall not apply or re-apply organotins compounds which act as biocides in anti-fouling systems. This applies to all ships (including fixed

and floating platforms, floating storage units (FSUs), and Floating Production Storage and Offtake units (FPSOs).³⁰

ii) Annex 2 establishes the required elements for the initial proposal of the amendments to the Convention pursuant to the Article 6.

iii) Annex 3 establishes the required elements of a comprehensive proposal of the amendments to the Convention, which are to be considered by the technical group pursuant to Articles 6, 7.

iv) Annex 4 includes the regulations for surveys, issuance or endorsements of an International Anti-fouling System Certificates, terms of validity of such certificates and requirements for Declaration on Anti-fouling systems. Moreover, appendixes to the Annex 4 contain model forms of International Anti-fouling System Certificate, Record of Anti-fouling systems, Endorsement of the Records and Declaration on Anti-fouling system.

2.2. Amendments

Article 6 provides the mechanism for proposing amendments to Annex 1 of the AFS Convention (controls on anti-fouling systems) and sets out how the evaluation of a substance should be carried out.

At its 71st session in July 2017, MEPC approved a new output to amend Annex 1 to the AFS Convention to include controls on cybutryne. While work on this matter is ongoing in the Sub-Committee on Pollution Prevention and Response, the scientific data presented so far indicates that cybutryne causes significant adverse effects to the environment, especially to aquatic ecosystems.³¹

2.3. Guidelines

Article 11 of the Convention contains references to the guidelines developed by the IMO.

The following guidelines have been developed and adopted:

³⁰ IMO, 'International Convention on the Control of Harmful Anti-fouling Systems on Ships' <[http://www.imo.org/en/About/Conventions/ListOfConventions/Pages/International-Convention-on-the-Control-of-Harmful-Anti-fouling-Systems-on-Ships-\(AFS\).aspx](http://www.imo.org/en/About/Conventions/ListOfConventions/Pages/International-Convention-on-the-Control-of-Harmful-Anti-fouling-Systems-on-Ships-(AFS).aspx)> accessed 3 January 2019.

³¹ IMO, 'Anti-fouling systems: Amendments to the Convention' <<http://www.imo.org/en/OurWork/Environment/Anti-foulingSystems/Pages/Default.aspx>> accessed 3 January 2019.

1) Guidelines for survey and certification of anti-fouling systems on ships - adopted by resolution MEPC.102(48), superseded by resolution MEPC.195(61);³²

2) Guidelines for brief sampling of anti-fouling systems on ships - adopted by resolution MEPC.104(49);³³

3) Guidelines for inspection of anti-fouling systems on ships - adopted by resolution MEPC.105(49), superseded by resolution MEPC.208(62);³⁴

4) Guidance on best management practices for removal of anti-fouling coatings from ships, including TBT hull paints (AFS.3/Circ.3).³⁵

³² Guidelines for survey and certification of anti-fouling systems on ships, adopted by resolution MEPC.195(61) 1 October 2010 (IMO Marine Environment Protection Committee).

³³ Guidelines for brief sampling of anti-fouling systems on ships, adopted by resolution MEPC.104(49) 18 July 2003 (IMO Marine Environment Protection Committee).

³⁴ Guidelines for inspection of anti-fouling systems on ships, adopted by resolution MEPC.208(62) 15 July 2011 (IMO Marine Environment Protection Committee).

³⁵ Guidance on best management practices for removal of anti-fouling coatings from ships, including TBT hull paints (AFS.3/Circ.3) 22 July 2009.

III. UKRAINE AS A PARTY TO THE AFS CONVENTION

Ukraine acceded to the AFS Convention in 2017, however the fact of non-existing proper implementation of the Convention seems to cause reasonable grounds for further elaboration of plan for domestication of the Convention rules.

3.1. Necessity for Ukraine to implement the AFS Convention

Ukraine is a maritime State with a coastal line of 1,355 km, including coasts on both Black Sea and the Sea of Azov.³⁶

The area of the Ukrainian territorial sea constitutes 29,454 km². The area of exclusive economic zone of Ukraine is 72,658 km²,³⁷ which constitutes 21.48% of the joint area of Black Sea and the Sea of Azov.

Ukraine is a State Party to major international instruments on marine environment protection, among which some highlight include MARPOL,³⁸ London Convention 1972,³⁹ CLC Protocol 1992,⁴⁰ UNCLOS 1982⁴¹ and others. These conventions are implemented in the Ukrainian legislation.

Furthermore, Ukraine, alike all Black Sea States (except Moldova), is a party to the Convention on the Protection of the Black Sea against Pollution (Bucharest Convention 1992),⁴² which prescribes, *inter alia*, to prevent pollution of the marine environment of the Black Sea from any source by substances, including organotin compounds.

However, the requirements for the restriction of organotin compounds (including TBT) application are not duly implemented into domestic legislation of Ukraine.

³⁶ Іван Дзюба and others, *Енциклопедія сучасної України* (Координаційне бюро Енциклопедії Сучасної України 2001-); [Author's translation]: Dziuba Ivan and others, *Encyclopedia of modern Ukraine* (Coordinative bureau of the Encyclopedia of modern Ukraine 2001-).

³⁷ NGO "Public Audit", 'Дослідження фінансування та антикорупційний аналіз ризиків у сфері діяльності Державної прикордонної служби України' (<http://publicaudit.com.ua/reports-on-audit/doslidzennya-finansuvannya-ta-antikorupciynnyu-analiz-ryzykiv-u-sfery-diyalnosti-dergavnoi-prykordonnoi-slygby-ukrainy/>) accessed 21 January 2019.

³⁸ International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto, MARPOL 73/78. Adopted 17 February 1973, entered into force 2 October 1983.

³⁹ Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter 1972, London Convention. Adopted 7 November 1996, entered into force 24 March 2006.

⁴⁰ International Convention on Civil Liability for Oil Pollution Damage, 1992 Protocol, CLC Protocol 1992.

⁴¹ Convention on the Law of the Sea 1982, UNCLOS. Adopted 10 December 1982, entered into force 16 November 1994.

⁴² Convention on the Protection of the Black Sea against Pollution 1992, Bucharest Convention (The Commission on the Protection of the Black Sea Against Pollution). Adopted 21 April 1992, entered into force 15 January 1994.

Moreover, the scope of the Bucharest Convention does not apply to the protection of the Sea of Azov.

Considering the above and taking into account the known effect of TBT, it would be rational for Ukraine to apply the terms of the AFS Convention for meeting its requirements, as well as for meeting the requirements of the Bucharest Convention simultaneously.

As soon as Ukrainian vessels comply with the anti-fouling systems standard, the less prospective problems they would meet in respect of freedom of shipping.

Moldova has become a maritime State not so far ago – at the beginning of XXI century. In fact, the only access to sea for Moldova is the area of about 400 m in length on the bank of Danube River (the port area is locked between Romanian and Ukrainian parts of the river). Thus, in case of proper enforcement of the Convention by Ukraine, all the area of Black Sea and the Sea of Azov (including inflowing rivers) would be covered by the restrictions of the Convention, excluding harmful effect of the anti-fouling systems.

Why anti-fouling regulations are so important for the Black Sea region?

First of all, there are more than 60 ports in the Black-Azov sea area, 28 of which are Ukrainian ports and terminals, and each of them constantly calls various vessels. So far, the quantity of hazardous substances from anti-fouling paints' residues in the sea might be very high.

At least Ukraine may heavily suffer from such situation because of, *inter alia*, the following reasons:

a) Tourism - there are more than 30 sea coastal resorts in Ukraine which welcome millions of people each year from different countries. Some of the resorts are in close proximity to the sea ports. Therefore, it is very likely that hazardous residues can directly influence millions of people every year only through the direct contact with sea water;

b) Food - the consumption of seafood in Ukraine constitutes 2.23 % of the total volume of food, thus the risk of consumption of seafood influenced by the hazardous residues is quite high. So far, considering the total population of Ukraine, which is more than 42 million, it is hardly imaginable how many people may suffer just because of the anti-fouling paints.

Considering all the above, it would be in Ukraine's best interest to protect environment and people from possibility to suffer from hazardous influence of anti-fouling systems brought into the sea by both vessels flying Ukrainian flag and foreign vessels called to Ukrainian ports.

3.2. Ukraine accession to the AFS Convention

In order to provide the grounds for reduction of sea pollution, on 21 of April 2017 the President of Ukraine issued a Decree on Ukraine Accession to International Convention on the Control of Harmful Anti-fouling Systems on Ships.⁴³

Ukraine deposited the relevant instrument on accession to the Secretary-General of IMO on 15 June 2017.⁴⁴

Under Article 18 paragraph 2 of the Convention, any instrument of ratification, acceptance, approval or accession deposited after the date on which this convention enters into force shall take effect three months after the date of deposit.⁴⁵ Therefore, the Convention entered into force for Ukraine on 15 September 2017.

The abovementioned Decree provides, that "In accordance with subtitle 2 of the heading "ii" of subparagraph (f), paragraph 2, Article 16, of the Convention, the amendment to Annex 1 will come into force for Ukraine only after the additional notification to the Secretary-General of the acceptance of such a change by Ukraine."⁴⁶ Thus, Ukraine realized its right provided by Article 16(2)(f)(ii)(3) of the Convention.

Therefore, Ukraine has performed all the necessary international actions in order to become a Party to the AFS Convention, however the question may arise in respect of proper implementation of the Convention in the domestic law of Ukraine.

Ukraine acceded to the Convention by the Decree of the President of Ukraine. This way is legitimate under Article 13 paragraph 1(b) of the Law on International Agreements, which provides, that "Decisions on Ukraine's accession to international treaties or their adoption shall be taken: in respect of international treaties concluded on

⁴³ The Decree of President of Ukraine on Ukraine Accession to International Convention on the Control of Harmful Anti-fouling Systems on Ships 21 April 2017 (President of Ukraine).

⁴⁴ IMO (n 29).

⁴⁵ IMO (n 30).

⁴⁶ The Decree of President of Ukraine on Ukraine Accession to International Convention on the Control of Harmful Anti-fouling Systems on Ships (n 43).

behalf of Ukraine which do not require ratification, in the form of a decree of the President of Ukraine.”⁴⁷

It logically follows, that accession to an international agreement may be taken in the form of a Decree of the President of Ukraine only if the treaty does not require ratification. The abovementioned law in article 9 paragraph 2 provides an exhaustive list of treaties, which require ratification. None of them fall within the scope of the AFS Convention except, theoretically, the one provided in subparagraph “e”⁴⁸: “other international treaties, the ratification of which is provided for by an international treaty or the law of Ukraine.”⁴⁹

Hence, provisions of Article 17 paragraph 2 of the AFS Convention should be taken in consideration:

“States may become Parties to this Convention by:
(a) signature not subject to ratification, acceptance or approval;
(b) signature subject to ratification, acceptance or approval, followed by ratification, acceptance or approval; or
(c) accession”.

Considering the absence of strict requirement for ratification in the Convention, and the provisions of the laws of Ukraine, Ukrainian accession to the Convention in form of the Decree of the President of Ukraine is lawful and appropriate.

Moreover, Article 8 of the Law on International Agreements provides, that Ukraine's consent to be bound by international treaty may be provided by signing, ratifying, approving, accepting the agreement, acceding to the agreement.

Therefore, Ukraine is bound by the AFS Convention on international level.

However, in accordance with the Constitution of Ukraine (hereinafter referred to as the “Constitution”), international agreements in force consented by the Verkhovna Rada⁵⁰ of Ukraine to be binding, shall be an integral part of the national legislation of Ukraine.⁵¹ Article 85 of the Constitution provides that Verkhovna Rada shall have a

⁴⁷ The Law of Ukraine On International Agreements of Ukraine 3 August 2004 (Verkhovna Rada of Ukraine).

⁴⁸ «e» is the seventh letter of Ukrainian alphabet. According to Ukrainian legislative drafting technique, alphabet may be used for numeration of the provisions alike in this particular case.

⁴⁹ The Law of Ukraine On International Agreements of Ukraine (n 48).

⁵⁰ ‘Verkhovna Rada’ is the name of the parliament of Ukraine.

⁵¹ Constitution of Ukraine 28 June 1996 (Verkhovna Rada of Ukraine).

power “to grant by the law the consent to the binding character of international agreements of Ukraine, and to denounce international agreements of Ukraine”.⁵²

The Constitution does not provide a possibility for international treaties to be an integral part of the national legislation of Ukraine in case the accession is made in a form of the Decree of the President of Ukraine. The only way for the Convention to become a part of Ukrainian domestic law automatically is to be acceded in the form of law, adopted by Verkhovna Rada.

Therefore, it appears, that although Ukraine is bound by the AFS Convention on international level, the Convention’s provisions are not implemented into the legislation of Ukraine and do not have effect of their mandatory application by Ukrainian authorities.

Thus, in order to comply with international regulations on the control of harmful anti-fouling systems on ships and to provide the grounds for reduction of sea pollution it would be in Ukraine’s best interest to domesticate the provisions of the AFS Convention, hence the convention would be duly implemented.

3.3. Implementation procedure

Ukraine meets the international requirements, imposed on State-Parties to the AFS Convention as for the acceding procedure, but does not provide adequate reflection of its provisions in domestic legislation. This deficiency should be rectified.

Article 92 of the Constitution of Ukraine provides:

“The following matters shall be determined exclusively by laws of Ukraine:

[...]

*6) the fundamentals of social protection, the forms and types of pension; the principles of the regulation of labour and employment, marriage, family, the protection of childhood, motherhood, and fatherhood; upbringing, education, culture, and health care; **ecological safety.**”⁵³*

⁵² Ibid.

⁵³ Constitution of Ukraine (n 52).

As far as the concern of the AFS Convention is to protect marine environment in order to ensure ecological safety, Ukrainian domestic regulations for implementation the Convention should be established by the laws of Ukraine.

In accordance with Article 85 paragraph 3 of the Constitution of Ukraine, Verkhovna Rada of Ukraine shall have the powers to adopt laws.⁵⁴ Therefore, domestication of the provisions of the AFS Convention should be performed in a way of adoption a Law of Ukraine by Verkhovna Rada of Ukraine. The Law may also prescribe direct orders to executive branch of powers to adopt subsidiary legislation and to appoint the responsible authorities for the purposes of the Convention.

Therefore, it would be reasonable and in the Ukraine's best interest to adopt the "Law of Ukraine on the Control of Harmful Anti-fouling Systems on Ships".

Additionally, considering that Article 12 of the Convention envisages establishing of sanctions for violations, it would be reasonable to establish exact sanctions in the implementing legislative act. As far as estimation of sanctions should be reasonable and adequate, gaps are to be left in the relevant provision of the draft of law hereafter in order to let competent authorities and Chambers of Parliament to estimate the scope of sanctions.

The adopted Law shall enter into force ten days after the date of its official promulgation, unless otherwise provided by law itself, but not before the day of its publication.⁵⁵

3.4. Particulars of the responsible authorities

Article 2 paragraph 1 of the Convention specifies the definition of the Administration, which means the Government of the State (flag State or coastal State). Further, the Convention establishes certain rights and obligations imposed on the Administration. So that, in order to ensure the proper application of the adopted law and to avoid any ambiguities and overlapping of powers it would be reasonable to appoint authorities responsible for proper application of the Law, and thus, the Convention.

In Ukraine the central authority, which implements State policy in the field of sea and river transport, commercial shipping, navigation on inland waterways, navigational

⁵⁴ Ibid.

⁵⁵ Ibid.

and hydrographic provision of navigation, as well as in the field of safety on the sea and river transport (except for the safety of navigation of vessels of the fleet of the fishing industry) is the State Service for Maritime and River Transport of Ukraine (Maritime Administration).

Among Maritime Administration's basic tasks is ensuring observance of and adherence to obligations taken under international treaties of Ukraine in the areas of sea and river transport, merchant shipping, navigation on inland waterways, navigational and hydrographic provision of navigation.⁵⁶

In order to perform its tasks, Maritime Administration, *inter alia*, carries out control over the implementation of the international agreements of Ukraine on navigation safety and prevention of environmental pollution from vessels flying the State Flag of Ukraine (flag State control), regardless of ownership (except for vessels of the fleet of the fishing industry); supervise the state of the port for the compliance of ships calling at the ports of Ukraine, the territorial sea and inland waters, irrespective of their flag, standards for the safety of navigation and prevention of pollution of the environment from ships.⁵⁷

Therefore, the Maritime Administration should be appointed as a relevant authority for the majority of purposes of the Convention.

Moreover, considering that Article 6 of the Convention establishes the right of State Parties to propose amendments, as well as the relevant process thereto, it would be reasonable to appoint an authority in charge for preparing, submission and further comprehensive elaborating of the proposal in order to ensure sustainable research of practice and developments in the field of anti-fouling systems. Taking into account the abovementioned powers of the Maritime Administration, it seems to be reasonable to appoint it as an authority in charge for these purposes.

As for the scientific and technical research and monitoring, prescribed by Article 8 of the Convention, the State Ecological Inspection of Ukraine should be appointed as a responsible authority, because of the following:

Under the Enactment on the State Ecological Inspection of Ukraine, the Inspection carries out state supervision (control) with respect to the observance by the central executive authorities and their territorial bodies, local executive authorities, local self-

⁵⁶ Enactment on the State Service of Sea and River Transport of Ukraine 6 September 2017.

⁵⁷ *Ibid.*

government bodies in relation to the exercise of powers delegated to them by executive authorities, enterprises, institutions and organizations irrespective of the form of ownership and management, citizens of Ukraine, foreigners and stateless persons, as well as legal entities - non-residents, the requirements of the legislation, *inter alia*, on environmental and radiation safety, in particular:

- use, reproduction and protection of the marine environment and natural resources of inland sea waters, the territorial sea, the exclusive (marine) economic zone of Ukraine and the continental shelf of Ukraine, observance of the norms of ecological safety;

- loading and unloading operations in ports, port facilities and on raids;

- observance of ships, ships of international conventions, agreements and requirements of environmental legislation of Ukraine on prevention of pollution of the marine environment.⁵⁸

Thus, all the operational rights and obligations of Ukraine under the Convention would be distinguished and clearly divided between State authorities in order to ensure the most effective application of the conventional requirements.

3.5. Innocent passage issue

One more point is to be established by the implementation instrument. Article 15 of the Convention provides, that nothing in this Convention shall prejudice the rights and obligations of any State under customary international law as reflected in the United Nations Convention on the Law of the Sea.

Therefore, it may be assumed, that this article allows States to go beyond the scope of the Convention in order to ensure proper protection of the environment against harmful anti-fouling substances.

Considering the fact, that Moldova is not a Party to the Convention, it may be assumed that ships which do not comply with anti-fouling regulations may call at the Port of Giurgiulești (the only port in Moldova). Even though reaching the Port of Giurgiulești is possible only through either Romanian or Ukrainian waters (both States are Parties to the Convention), the vessel might rely on the right of innocent passage and carry harmful substances in the territorial and internal waters of Romania and Ukraine, as well as to the

⁵⁸ Enactment on the State Ecological Inspection of Ukraine 19 April 2017.

Danube River. Therefore, it would be in the best interest for Ukraine to find a legal way to regulate such a threat.

Article 21(1)(f) of UNCLOS entitles States to adopt laws and regulations, relating to innocent passage through the territorial sea in respect of the preservation of the environment of the coastal State and the prevention, reduction and control of pollution thereof. It may be argued, that part 2 of this Article excludes design, construction and equipment from this regulation (anti-fouling systems may be considered as one of these elements). However, in case of recognition of the AFS Convention as “generally accepted rules and standards”, this exclusion cannot apply under the same provision of part 2 of the Article.

Taking into account that the Convention covers more than 95% of the gross tonnage of the world’s merchant fleet, it may be considered as “generally accepted rules and standards” under the Article 21(2) of UNCLOS. Thus, it seems to be reasonable and lawful to establish a regime for regulation of innocent passage in order to preserve the environment.

However, in order not to interfere with normal shipping practice, this regime should be of such a nature, that would allow controlling the area without unreasonable delays of the vessels and abusing of rights of the ship under international law.

It seems to be reasonable to request vessels, which call at the Port of Giurgiulești, to provide evidence of compliance with the AFS Convention prior to entering the internal waters of Ukraine. In case of providing the relevant evidence, the vessel would continue the voyage without delays related to the control regime, otherwise Ukrainian authorities would be entitled to request the vessel to leave territorial waters of Ukraine.

Law of Ukraine on the Control of Harmful Anti-fouling Systems on Ships

(draft):



Law of Ukraine

On the Control of Harmful Anti-fouling Systems on Ships (Vidomosti of Verkhovna Rada (VVR), 20__, № __, p.__)

Verkhovna Rada of Ukraine,

NOTING that scientific studies and investigations by Governments and competent international organizations have shown that certain anti-fouling systems used on ships pose a substantial risk of toxicity and other chronic impacts to ecologically and economically important marine organisms and also that human health may be harmed as a result of the consumption of affected seafood,

NOTING IN PARTICULAR the serious concern regarding anti-fouling systems that use organotin compounds as biocides and being convinced that the introduction of such organotins into the environment must be phased-out,

RECALLING that Chapter 17 of Agenda 21 adopted by the United Nations Conference on Environment and Development, 1992, calls upon States to take measures to reduce pollution caused by organotin compounds used in anti-fouling systems,

RECALLING ALSO that resolution A.895(21), adopted by the Assembly of the International Maritime Organization on 25 November 1999, urges the Organization's Marine Environment Protection Committee (MEPC) to work towards the expeditious development of a global legally binding instrument to address the harmful effects of anti-fouling systems as a matter of urgency,

MINDFUL OF the precautionary approach set out in Principle 15 of the Rio Declaration on Environment and Development and referred to in resolution MEPC.67(37) adopted by MEPC on 15 September 1995,

RECOGNIZING the importance of protecting the marine environment and human health from adverse effects of anti-fouling systems,

RECOGNIZING ALSO that the use of anti-fouling systems to prevent the build-up of organisms on the surface of ships is of critical importance to efficient commerce, shipping and impeding the spread of harmful aquatic organisms and pathogens,

RECOGNIZING FURTHER the need to continue to develop anti-fouling systems, which are effective and environmentally safe and to promote the substitution of harmful systems by less harmful systems or preferably harmless systems,

MEETING the obligation of proper implementation of the International Convention on the Control of Harmful Anti-fouling Systems on Ships, to which Ukraine is a State Party according to the Decree of the President of Ukraine on Ukraine Accession to The International Convention on the Control of Harmful Anti-fouling Systems on Ships,

DECREES as follows:

ARTICLE 1

Definitions

For the purposes of this Law, unless expressly provided otherwise:

(1) “Administration” means the Government of the State under whose authority the ship is operating. With respect to a ship entitled to fly a flag of a State, the Administration is the Government of that State. With respect to fixed or floating platforms engaged in exploration and exploitation of the sea-bed and subsoil thereof adjacent to the coast over which the coastal State exercises sovereign rights for the purposes of exploration and exploitation of their natural resources, the Administration is the Government of the coastal State concerned.

(2) “Anti-fouling system” means a coating, paint, surface treatment, surface, or device that is used on a ship to control or prevent attachment of unwanted organisms.

(3) “Committee” means the Marine Environment Protection Committee of the Organization.

(4) “Convention” means the International Convention on the Control of Harmful Anti-fouling Systems on Ships.

(5) “Gross tonnage” means the gross tonnage calculated in accordance with the tonnage measurement regulations contained in Annex 1 to the International Convention on Tonnage Measurement of Ships, 1969, or any successor Convention.

(6) “International voyage” means a voyage by a ship entitled to fly the flag of one State to or from a port, shipyard, or offshore terminal under the jurisdiction of another State.

(7) “Length” means the length as defined in the International Convention on Load Lines, 1966, as modified by the Protocol of 1988 relating thereto, or any successor Convention.

(8) “Maritime Administration” means the State Service for Maritime and River Transport of Ukraine.

(9) “Organization” means the International Maritime Organization.

(10) “Party” means a State, which is a State Party to the International Convention on the Control of Harmful Anti-fouling Systems on Ships, 2001.

(11) “Ship” means a vessel of any type whatsoever operating in the marine environment and includes hydrofoil boats, air-cushion vehicles, submersibles, floating craft, fixed or floating platforms, floating storage units (FSUs) and floating production storage and off-loading units (FPSOs).

ARTICLE 2

Application

(1) Unless otherwise specified in this Law, this Law shall apply to:

(a) ships entitled to fly the flag of Ukraine;

(b) ships not entitled to fly the flag of Ukraine, but which operate under the authority of Ukraine; and

(c) foreign ships that enter a port, shipyard, or offshore terminal of Ukraine, but do not fall within subparagraph (a) or (b).

(2) This Law shall not apply to any warships, naval auxiliary, or other ships owned or operated by Ukraine or by a Party and used, for the time being, only on government non-commercial service.

(3) With respect to foreign ships of non-Parties to the Convention, requirements of this Law shall be applied as may be necessary to ensure that no more favourable treatment is given to such ships.

ARTICLE 3

Controls on Anti-Fouling Systems

(1) In accordance with the requirements specified in Annex 1 to this Law, it is prohibited:

(a) the application, re-application, installation, or use of harmful anti-fouling systems on ships referred to in article 2(1)(a) or (b); and

(b) the application, re-application, installation or use of such systems, whilst in Ukrainian port, shipyard, or offshore terminal, on ships referred to in article 2(1)(c), and effective measures shall be taken to ensure that such ships comply with those requirements.

(2) Ships bearing an anti-fouling system, which is controlled through an amendment to Annex 1 following entry into force of the Convention may retain that system until the next scheduled renewal of that system, but in no event for a period exceeding 60 months

following application, unless the Committee decides that exceptional circumstances exist to warrant earlier implementation of the control.

ARTICLE 4

Controls of Annex 1 Waste Materials

(1) Taking into account international rules, standards and requirements, appropriate measures shall be taken to require that wastes from the application or removal of an anti-fouling system controlled in Annex 1 are collected, handled, treated and disposed of in a safe and environmentally sound manner to protect human health and the environment.

(2) The Maritime Administration shall be responsible for providing the necessary facilities, as well as for performing the mandatory for port State actions required by this article in order to comply with the requirements set up in paragraph (1) of this article.

ARTICLE 5

Scientific and Technical Research and Monitoring

(1) Appropriate measures shall be taken to promote and facilitate scientific and technical research on the effects of anti-fouling systems as well as monitoring of such effects. In particular, such research should include observation, measurement, sampling, evaluation and analysis of the effects of anti-fouling systems.

(2) The State Ecological Inspection of Ukraine, to further the objectives of this Law, shall promote the availability of relevant information to other Parties who request it on:

- (a) scientific and technical activities undertaken in accordance with this Law;
- (b) marine scientific and technological programmes and their objectives; and
- (c) the effects observed from any monitoring and assessment programmes relating to anti-fouling systems.

ARTICLE 6

Communication and Exchange of Information

(1) The Maritime Administration undertakes to communicate to the Organization:

- (a) a list of the nominated surveyors or recognized organizations which are authorized to act on behalf of Ukraine in the administration of matters relating to the control of anti-fouling systems in accordance with the Convention for circulation to the Parties for the information of their officers. The Maritime Administration shall

therefore notify the Organization of the specific responsibilities and conditions of the authority delegated to nominated surveyors or recognized organizations; and

(b) on an annual basis, information regarding any anti-fouling systems approved, restricted, or prohibited under Ukrainian legislation.

(2) For those anti-fouling systems approved, registered or licensed in Ukraine, the Maritime Administration shall either provide, or require the manufacturers of such anti-fouling systems to provide, to those Parties which request it, relevant information on which its decision was based, including information provided for in Annex 3 to this Law, or other information suitable for making an appropriate evaluation of the anti-fouling system. No information shall be provided that is protected by law.

ARTICLE 7

Survey and Certification

All the ships entitled to fly the Ukrainian flag or operating under the authority of Ukraine shall be surveyed and certified in accordance with the regulations in Annex 4 by the Maritime Administration.

ARTICLE 8

Inspections of Ships and Detection of Violations

(1) A ship to which this Law applies may, in any port, shipyard, or offshore terminal of Ukraine, be inspected by the Maritime Administration for the purpose of determining whether the ship is in compliance with this Law. Unless there are clear grounds for believing that a ship is in violation of this Law, any such inspection shall be limited to:

(a) verifying that, where required, there is onboard a valid International Anti-fouling System Certificate or a Declaration on Anti-fouling System; and/or

(b) a brief sampling of the ship's anti-fouling system that does not affect the integrity, structure, or operation of the anti-fouling system taking into account guidelines developed by the Organization. However, the time required to process the results of such sampling shall not be used as a basis for preventing the movement and departure of the ship.

(2) If there are clear grounds to believe that the ship is in violation of this Law, a thorough inspection may be carried out taking into account guidelines developed by the Organization.

(3) If the ship is detected to be in violation of this Law, steps may be taken to warn, detain, dismiss, or exclude the ship from the ports. On taking such action against a ship for the reason that the ship does not comply with this Law, the Maritime Administration shall immediately inform the Administration of the ship concerned.

(4) The Maritime Administration may also inspect a ship when it enters the ports, shipyards, or offshore terminals under jurisdiction of Ukraine, if a request for an investigation is received from any Party, together with sufficient evidence that a ship is operating or has operated in violation of this Law and/or the Convention. The report of such investigation shall be sent to the Party requesting it and to the competent authority of the Administration of the ship concerned so that the appropriate action may be taken under this Law.

ARTICLE 9

Violations

(1) Any violation of this Law is prohibited and sanctions shall be established therefor under the law of Ukraine on ships referred to in article 2(l)(a) or (b) wherever the violation occurs.

(2) If the Maritime Administration is informed of such a violation by ships entitled to fly the flag of Ukraine or operating under authority of Ukraine, it shall investigate the matter and may request the reporting Party to furnish additional evidence of the alleged violation. If the Maritime Administration is satisfied that sufficient evidence is available to enable proceedings to be brought in respect of the alleged violation, it shall cause such proceedings to be taken as soon as possible, in accordance with laws. The Maritime Administration shall promptly inform the Party that reported the alleged violation, as well as the Organization, of any action taken. If the Maritime Administration has not taken any action within one year after receiving the information, it shall so inform the Party which reported the alleged violation.

(3) Any violation of this Law by all ships subject to this Law within the jurisdiction of Ukraine is prohibited and sanctions shall be established therefor under the law of Ukraine. Whenever such a violation occurs, the Maritime Administration shall either:

(a) cause proceedings to be taken in accordance with the laws of Ukraine; or

(b) furnish to the Administration of the ship concerned such information and evidence as may be in its possession that a violation has occurred.

(3) The violation of this Law entails imposing a fine from _____ to _____ tax-free minimum incomes of citizens, without prejudice to civil liability for the damage to the environment.

ARTICLE 10

Undue Delay or Detention of Ships

(1) All possible efforts shall be made to avoid a ship being unduly detained or delayed under article 8 or 9.

(2) The Maritime Administration shall detain a ship when:

(a) a ship referred to in article 2 paragraph (1) applies, re-applies, install or use harmful anti-fouling systems, whilst in Ukrainian port, shipyard, or offshore terminal;

(b) wastes from the application or removal of an anti-fouling system controlled in Annex 1 are transmitted from a ship referred to in article 2 paragraph (1) for collection, handling, treatment and disposal of in violation of Article 4 paragraph (1);

(c) a ship referred to in article 2 paragraph (1)(a)(b) is not duly surveyed and certified in accordance with the regulations in Annex 4 by the Maritime Administration;

(d) a ship referred to in article 2 paragraph (1) violates any other requirements prescribed by this law.

(3) When a ship is unduly detained or delayed under article 8 or 9, it shall be entitled to compensation for any loss or damage suffered.

ARTICLE 11

Territorial waters entry regime

(1) The Maritime Administration can require every vessel entering the territorial waters of Ukraine, notwithstanding whether calling to Ukrainian or foreign ports, to provide evidence of compliance with the Convention. If the appropriate evidence is provided, the vessel may continue passage through the territorial sea of Ukraine in compliance with Ukrainian and international law.

(2) In case of the vessel's failure to provide the appropriate evidence of compliance, as required by Paragraph 1 of this Article, the Maritime Administration can request the vessel to leave territorial or internal waters of Ukraine, as well as any other non-maritime internal waters of Ukraine.

(3) The Maritime Administration can use the relevant powers and request assistance of other Ukrainian authorities in order to ensure, that the vessel follows the request, as provided in Paragraph 2 of this Article, unless the vessel further provides the relevant evidence of compliance.

ARTICLE 12

Proposing Amendments to Controls on Anti-Fouling Systems

(1) The Maritime Administration is in charge for and may propose an amendment to Annex 1 in accordance with this article.

(2) An initial proposal shall contain the information required in Annex 2, and shall be submitted to the Organization.

(3) If the Committee decides that further more in-depth review is warranted, and requires the Maritime Administration to submit to the Committee a comprehensive proposal containing the information required in Annex 3, the Maritime Administration shall submit all the information required in Annex 3. Where the Committee is of the view that there is a threat of serious or irreversible damage.

ARTICLE 13

Annexes

(1) Annexes to this Law and Appendixes thereto are attached hereto and are considered as integral part of this Law.

ARTICLE 14

Final Provisions

(1) The Cabinet of Ministers of Ukraine promptly after this Law enters into force shall:

(a) Take all necessary steps in order to provide the relevant technical, administrative and clerical facilities required for the proper adherence to the requirements of this Law.

(b) Adopt subsidiary legislation (if necessary) to empower the State Service for Maritime and River Transport of Ukraine to perform its rights and obligations established by this Law.

(c) Adopt subsidiary legislation (if necessary) to empower the State Ecological Inspection of Ukraine to perform its rights and obligations established by this Law.

(2) This Law shall enter into force the next day after its official publication.

President of Ukraine
Kyiv

Petro Poroshenko

— _____ 20__

№ _____

ANNEX 1

CONTROLS ON ANTI-FOULING SYSTEMS

Anti-fouling system	Control measures	Application	Effective date
Organotin compounds which act as biocides in anti-fouling systems	Ships shall not apply or re-apply such compounds	All ships	1 January 2003
Organotin compounds which act as biocides in anti-fouling systems	Ships either: (1) shall not bear such compounds on their hulls or external parts or surfaces; or (2) shall bear a coating that forms a barrier to such compounds leaching from the underlying noncompliant antifouling systems	All ships (except fixed and floating platforms, FSUs, and FPSOs that have been constructed prior to 1 January 2003 and that have not been in dry-dock on or after 1 January 2003)	1 January 2008

ANNEX 2

REQUIRED ELEMENTS FOR AN INITIAL PROPOSAL

- (1) An initial proposal shall include adequate documentation containing at least the following:
 - (a) identification of the anti-fouling system addressed in the proposal: name of the anti-fouling system; name of active ingredients and Chemical Abstract Services Registry Number (CAS number), as applicable; or components of the system which are suspected of causing the adverse effects of concern;
 - (b) characterization of the information which suggests that the anti-fouling system or its transformation products may pose a risk to human health or may cause adverse effects in non-target organisms at concentrations likely to be found in the environment (e.g., the results of toxicity studies on representative species or bioaccumulation data);
 - (c) material supporting the potential of the toxic components in the anti-fouling system, or its transformation products, to occur in the environment at concentrations which could result in adverse effects to non-target organisms, human health, or water quality (e.g., data on persistence in the water column, sediments and biota; the release rate of toxic components from treated surfaces in studies or under actual use conditions; or monitoring data, if available);
 - (d) an analysis of the association between the anti-fouling system, the related adverse effects and the environmental concentrations observed or anticipated; and
 - (e) a preliminary recommendation on the type of restrictions that could be effective in reducing the risks associated with the anti-fouling system.
- (2) An initial proposal shall be submitted in accordance with rules and procedures of the Organization.

ANNEX 3

REQUIRED ELEMENTS OF A COMPREHENSIVE PROPOSAL

(1) A comprehensive proposal shall include adequate documentation containing the following:

- (a) developments in the data cited in the initial proposal;
- (b) findings from the categories of data set out in paragraphs (3)(a), (b) and (c), as applicable, depending on the subject of the proposal and the identification or description of the methodologies under which the data were developed;
- (c) a summary of the results of studies conducted on the adverse effects of the anti-fouling system;
- (d) if any monitoring has been conducted, a summary of the results of that monitoring, including information on ship traffic and a general description of the area monitored;
- (e) a summary of the available data on environmental or ecological exposure and any estimates of environmental concentrations developed through the application of mathematical models, using all available environmental fate parameters, preferably those which were determined experimentally, along with an identification or description of the modelling methodology;
- (f) an evaluation of the association between the anti-fouling system in question, the related adverse effects and the environmental concentrations, either observed or expected;
- (g) a qualitative statement of the level of uncertainty in the evaluation referred to in subparagraph (f);
- (h) a recommendation of specific control measures to reduce the risks associated with the anti-fouling system; and
- (i) a summary of the results of any available studies on the potential effects of the recommended control measures relating to air quality, shipyard conditions, international shipping and other relevant sectors, as well as the availability of suitable alternatives.

(2) A comprehensive proposal shall also include information on each of the following physical and chemical properties of the component(s) of concern, if applicable:

- melting point;
- boiling point;
- density (relative density);
- vapour pressure;
- water solubility / pH / dissociation constant (pKa);
- oxidation/reduction potential;
- molecular mass;

- molecular structure; and
- other physical and chemical properties identified in the initial proposal.

(3) For the purposes of paragraph (1)(b) above, the categories of data are:

(a) Data on environmental fate and effect:

- modes of degradation/dissipation (e.g. hydrolysis/photodegradation/biodegradation);
- persistence in the relevant media (e.g., water column/sediments/biota);
- sediments/water partitioning;
- leaching rates of biocides or active ingredients;
- mass balance;
- bioaccumulation, partition coefficient, octanol/water coefficient; and
- any novel reactions on release or known interactive effects.

(b) Data on any unintended effects in aquatic plants, invertebrates, fish, seabirds, marine mammals, endangered species, other biota, water quality, the seabed, or habitat of non-target organisms, including sensitive and representative organisms:

- acute toxicity;
- chronic toxicity;
- developmental and reproductive toxicity;
- endocrine disruption;
- sediment toxicity;
- bioavailability/biomagnification/bioconcentration;
- food web/population effects;
- observations of adverse effects in the field/fish kills/ strandings/ tissue analysis; and
- residues in seafood.

These data shall relate to one or more types of non-target organisms such as aquatic plants, invertebrates, fish, birds, mammals and endangered species.

(c) Data on the potential for human health effects (including, but not limited to, consumption of affected seafood).

(4) A comprehensive proposal shall include a description of the methodologies used, as well as any relevant measures taken for quality assurance and any peer review conducted of the studies.

ANNEX 4

SURVEYS AND CERTIFICATION REQUIREMENTS FOR ANTI-FOULING SYSTEMS

REGULATION 1

Surveys

(1) Ships of 400 gross tonnage and above referred to in article 2(1)(a) engaged in international voyages, excluding fixed or floating platforms, FSUs, and FPSOs, shall be subject to surveys specified below:

(a) an initial survey before the ship is put into service or before the International Antifouling System Certificate (Certificate) required under regulation 2 or 3 is issued for the first time; and

(b) a survey when the anti-fouling systems are changed or replaced. Such surveys shall be endorsed on the Certificate issued under regulation 2 or 3.

(2) The survey shall be such as to ensure that the ship's anti-fouling system fully complies with this Law.

(3) The Maritime Administration shall establish appropriate measures for ships that are not subject to the provisions of paragraph (1) of this regulation in order to ensure that this Law is complied with.

(4) (a) As regards the enforcement of this Law, surveys of ships shall be carried out by officers duly authorized by the Maritime Administration or as provided in regulation 3(1), taking into account guidelines for surveys developed by the Organization. Alternatively, the Maritime Administration may entrust surveys required by this Law either to surveyors nominated for that purpose or to organizations recognized by it.

(b) The Maritime Administration nominating surveyors or recognizing organizations to conduct surveys shall, as a minimum, empower any nominated surveyor or recognized organization to:

(i) require a ship that it surveys to comply with the provisions of Annex 1; and

(ii) carry out surveys if requested by the appropriate authorities of a port State that is a Party to the Convention.

(c) When the Maritime Administration, a nominated surveyor, or a recognized organization determines that the ship's anti-fouling system does not conform either to the particulars of a Certificate required under regulation 2 or 3, or to the requirements of this Law, Maritime Administration, surveyor or organization shall immediately ensure that corrective action is taken to bring the ship into compliance. A surveyor or organization shall also in due course notify the Maritime Administration of any such determination. If the required corrective

action is not taken, the Maritime Administration shall be notified forthwith and it shall ensure that the Certificate is not issued or is withdrawn as appropriate.

(d) In the situation described in subparagraph (c), if the ship is in the port of another Party, the appropriate authorities of the port State shall be notified forthwith.

(e) When the Maritime Administration, a nominated surveyor, or a recognized organization is notified by the appropriate authorities of a Party on the situation described in subparagraph (c), the Maritime Administration shall give such Administration, surveyor, or organization any necessary assistance to carry out their obligations under this regulation, including any action described in article 8 or 9.

REGULATION 2

Issue or Endorsement of an International Anti-fouling System Certificate

(1) The Maritime Administration shall require that a ship to which regulation 1 applies is issued with a Certificate after successful completion of a survey in accordance with regulation 1. A Certificate issued under the authority of a Party shall be accepted by the Maritime Administration and regarded for all purposes covered by this Law as having the same validity as a Certificate issued by them.

(2) Certificates shall be issued or endorsed either by the Maritime Administration or by any person or organization duly authorized by it. In every case, the Maritime Administration assumes full responsibility for the Certificate.

(3) For ships bearing an anti-fouling system controlled under Annex 1 that was applied before the date of entry into force of a control for such a system, the Maritime Administration shall issue a Certificate in accordance with paragraphs (2) and (3) of this regulation not later than two years after entry into force of that control. This paragraph shall not affect any requirement for ships to comply with Annex 1.

(4) The Certificate shall be drawn up in the form corresponding to the model given in Appendix 1 to this Annex and shall be written at least in both Ukrainian and English. Ukrainian language shall prevail in the case of the dispute or discrepancy.

REGULATION 3

Issue or Endorsement of an International Anti-fouling System Certificate by another Party or on the request of another Party

(1) At the request of the Administration, Maritime Administration may cause a ship to be surveyed and, if satisfied that this Law has been complied with, it shall issue or authorize the issue of a Certificate to the ship and, where appropriate, endorse or authorize the endorsement of that Certificate for the ship, in accordance with this Law.

(2) A copy of the Certificate and a copy of the survey report shall be transmitted as soon as possible to the requesting Administration.

(3) A Certificate so issued shall contain a statement that it has been issued at the request of the Administration referred to in paragraph (1) and it shall have the same force and receive the same recognition as a Certificate issued by the Administration.

(4) No Certificate shall be issued to a ship which is entitled to fly the flag of a State which is not a Party.

(5) The Maritime Administration may request the Administration of another Party to cause a ship to be surveyed and, if satisfied that the Convention has been complied with, to issue or authorize the issue of a Certificate to the ship and, where appropriate, endorse or authorize the endorsement of that Certificate for the ship, in accordance with the Convention.

REGULATION 4

Validity of an International Anti-fouling System Certificate

(1) A Certificate issued under regulation 2 or 3 shall cease to be valid in either of the following cases:

(a) if the anti-fouling system is changed or replaced and the Certificate is not endorsed in accordance with this Law; and

(b) upon transfer of the ship from the flag of another State. A new Certificate shall only be issued when the Maritime Administration is fully satisfied that the ship is in compliance with this Law.

In the case of a transfer from another Party, the Maritime Administration may request within three months after the transfer has taken place, the Party whose flag the ship was formerly entitled to fly shall, to transmit to the Maritime Administration a copy of the Certificates carried by the ship before the transfer and, if available, a copy of the relevant survey reports.

In case of a transfer from Ukraine to another Party, if requested by the Administration of another Party within three months after the transfer has taken place, the Maritime Administration shall, as soon as possible, transmit to the Administration a copy of the Certificates carried by the ship before the transfer and, if available, a copy of the relevant survey reports.

(2) The issue of a new Certificate to a ship transferred from another Party may be based on a new survey or on a valid Certificate issued by the previous Party whose flag the ship was entitled to fly.

REGULATION 5

Declaration on Anti-fouling System

(1) The Maritime Administration shall require a ship of 24 m or more in length, but less than 400 gross tonnage engaged in international voyages and to which article 3(1)(a) applies (excluding fixed or floating platforms, FSUs, and FPSOs) to carry a Declaration signed by the owner or owner's authorized agent. Such Declaration shall be accompanied by appropriate documentation (such as a paint receipt or a contractor invoice) or contain appropriate endorsement.

(2) The Declaration shall be drawn up in the form corresponding to the model given in Appendix 2 to this Annex and shall be written in Ukrainian and English. Ukrainian language shall prevail in the case of a dispute or discrepancy.

APPENDIX 1 TO ANNEX 4

FORM OF INTERNATIONAL ANTI-FOULING SYSTEM CERTIFICATE

**МІЖНАРОДНЕ СВДОЦТВО ПРО ПРОИОБРОСТАЮЧУ СИСТЕМУ
INTERNATIONAL ANTI-FOULING SYSTEM CERTIFICATE**

(Це свідоцтво доповнюється Описом протиобростаючих систем)
(This certificate shall be supplemented by a record of Anti-fouling Systems)

УКРАЇНА
UKRAINE

**Державна служба морського та
річкового транспорту України**
State Service for Maritime and River
Transport of Ukraine

Видано на підставі положень
Issued under the

**Міжнародної конвенції про контроль за шкідливими протиобростаючими
системами на суднах**
International Convention on the Control of Harmful Anti-fouling Systems on Ships

за вповноваженням Уряду
under the authority of the Government of

УКРАЇНИ
UKRAINE

Державною службою морського та річкового транспорту України
by State Service for Maritime and River Transport of Ukraine

Якщо Свідоцтво видавалося раніше, це свідоцтво замінює
When a Certificate has been previously issued, this Certificate replaces the
свідоцтво, видане: ————— р.
certificate dated:

Відомості про судно
Particulars of ship

Назва судна (Name of ship)	
Відмітний номер або позивний сигнал (Distinctive number or letters)	
Порт реєстрації (Port of registry)	
Валова місткість (Gross tonnage)	
Номер ІМО (IMO number)	

Протиобростаюча система, що контролюється відповідно до Додатка 1, не
An anti-fouling system controlled under Annex 1 has not been
наносилася під час або після побудови цього судна
applied during or after construction of this ship _____

Протиобростаюча система, що контролюється відповідно до Додатка 1,
An anti-fouling system controlled under Annex 1
раніше наносилася на це судно, але була знята _____
has been applied on this ship previously, but has been removed by

_____ (зазначити назву підприємства) _____ (дата)
(insert name of the facility) (date)

Протиобростаюча система, що контролюється відповідно до Додатка 1, раніше
An anti-fouling system controlled under Annex 1
наносилася на це судно, однак була покрита герметизуючим шаром
has been applied on this ship previously, covered with a sealer coat applied by

_____ (зазначити назву підприємства) _____ (дата)
(insert name of the facility) (date)

Протиобростаюча система, що контролюється відповідно до Додатка 1,
An anti-fouling system controlled under Annex 1
була нанесена на це судно до _____, однак
has been applied on this prior to _____ (дата / date) but
повинна бути знята, або покрита герметизуючим шаром до _____
must be removed or covered with a sealer coat prior to _____ (дата / date)

ЦИМ ПОСВІДЧУЄТЬСЯ, ЩО:
THIS IS TO CERTIFY THAT:

1. судно оглянуте відповідно до правила 1 Додатка 4 до Конвенції; і
1. the ship has been surveyed in accordance with regulation 1 of Annex 4 to the Convention;
and
2. оглядом встановлено, що протиобростаюча система судна відповідає вимогам
Додатка 1 до Конвенції.
2. the survey shows that the anti-fouling system on the ship complies with the applicable
requirements of Annex 1 to the Convention.

Видано в _____
Issued at _____ (Місце видачі Свідоцтва / Place of issue of Certificate)

(Дата видачі)
(Date of issue)

(Печатка)
(Seal)

(Підпис уповноваженої особи, яка
видала Свідоцтво / Signature of authorized
official issuing the Certificate)

Дата завершення огляду, на підставі якого видано це свідоцтво: _____
Date of completion of the survey on which this certificate is issued:

FORM OF RECORD OF ANTI-FOULING SYSTEMS

**ОПИС ПРОТИОБРОСТАЮЧИХ СИСТЕМ
RECORD OF ANTI-FOULING SYSTEMS**

(Цей Опис повинен бути постійно доданий до Міжнародного свідоцтва про протиобростаючу систему)
(This Record shall be permanently attached to the International Anti-fouling System Certificate)

Дані про судно
Particulars of ship

Назва судна (Name of ship)	
Відмітний номер або позивний сигнал (Distinctive number or letters)	
Порт реєстрації (Port of registry)	
Валова місткість (Gross tonnage)	
Номер ІМО (IMO number)	

Дані про нанесену (і) протиобростаючу (і) систему (і)
Details of anti-fouling system(s) applied

Тип(и) використаної(их) протиобростаючої (их) системи (систем)
Type(s) of anti-fouling system(s) used

Дата(и) нанесення протиобростаючої (их) системи (систем) _____
Date(s) of application of anti-fouling system(s)

Назва(и) компанії(й) та підприємства (підприємств) / місця(ь) нанесення
Name(s) of company(ies) and facility(ies)/location(s) where applied

Назва(и) виробника(ів) протиобростаючої (их) системи (систем)
Name(s) of anti-fouling system(s) manufacturer(s)

Назва(и) та колір (кольори) протиобростаючої (их) системи (систем)
Name(s) and colour(s) of anti-fouling system(s)

Активний (і) елемент(и) та його (їх) Реєстраційний(і) номер(и) Хімічної Реферативної Служби (Номер(и) CAS)
Active ingredient(s) and their Chemical Abstract Services Registry Number(s) (CAS number(s))

Тип(и) герметизуючого покриття, якщо застосовувався
Type(s) of sealer coat, if applicable

Назва(и) та колір(и) герметизуючого покриття, якщо застосовувався
Name(s) and colour(s) of sealer coat applied, if applicable

Дата застосування герметизуючого покриття _____
Date of application of sealer coat

ЦИМ ПОСВІДЧУЄТЬСЯ, що цей Опис містить достовірні в усіх відношеннях дані

THIS IS TO CERTIFY that this Record is correct in all respects.

Видано в _____
Issued at (Місце видачі Опису / Place of issue of Record)

(Дата видачі)
(Date of issue)

(Печатка)
(Seal)

(Підпис уповноваженої особи, яка видала Опис / Signature of authorized official issuing the Record)

Підтвердження Опису
Endorsement of the Records

ЦИМ ПОСВІДЧУЄТЬСЯ, що оглядом, передбаченим правилом 1(1)(b) додатка 4 до Конвенції, встановлено, що судно відповідає вимогам Конвенції

THIS IS TO CERTIFY that a survey required in accordance with regulation 1(1)(b) of Annex 4 to the Convention found that the ship was in compliance with the Convention

Деталі нанесеної(их) протиобростачої (их) системи (систем)

Details of anti-fouling system(s) applied

Тип(и) використаної(их) протиобростачої (их) системи (систем)

Type(s) of anti-fouling system(s) used

Дата(и) нанесення протиобростачої (их) системи (систем) _____

Date(s) of application of anti-fouling system(s)

Назва(и) компанії(й) та підприємства (підприємств) / місця(ь) нанесення

Name(s) of company(ies) and facility(ies)/location(s) where applied

Назва(и) виробника(ів) протиобростачої (их) системи (систем)

Name(s) of anti-fouling system(s) manufacturer(s)

Назва(и) та колір(и) протиобростачої (их) системи (систем)

Name(s) and colour(s) of anti-fouling system(s)

Активний елемент(и) та їх Реєстраційний(і) номер(и) Хімічної Реферативної Служби (Номер(и) CAS)

Active ingredient(s) and their Chemical Abstract Services Registry Number(s) (CAS number(s))

Тип(и) герметизуючого покриття, якщо застосовувався

Type(s) of sealer coat, if applicable

Назва(и) та колір(и) герметизуючого покриття, якщо застосовувався

Name(s) and colour(s) of sealer coat applied, if applicable

Дата нанесення герметизуючого покриття _____

Date of application of sealer coat

Підписано: _____

Signed: (Підпис уповноваженої особи, яка видала Опис)
(Signature of authorized official issuing the Record)

Місце: _____

Place:

Дата: _____

Date:

(Печатка або штамп органу)
(Seal or stamp of the authority)

APPENDIX 2 TO ANNEX 4

FORM OF DECLARATION ON ANTI-FOULING SYSTEM

**ДЕКЛАРАЦІЯ ПРО ПРОТИБРОСТАЮЧУ СИСТЕМУ
DECLARATION ON ANTI-FOULING SYSTEM**

*Складена на підставі положень
Drawn up under the*

**Міжнародної конвенції про контроль за шкідливими протибростаючими
системами на суднах**
International Convention on the Control of Harmful Anti-fouling Systems on Ships

Назва судна (Name of ship)	
Відмітний номер або позивний сигнал (Distinctive number or letters)	
Порт реєстрації (Port of registry)	
Довжина (Length)	
Валова місткість (Gross tonnage)	
Номер ІМО (IMO number)	

Цим заявляю, що протибростаюча система, яка використовується на цьому судні, відповідає Додатку 1 до Конвенції

I declare that the anti-fouling system used on this ship complies with Annex 1 of the Convention

(Дата) (Підпис власника або вповноваженого агента власника)
(Date) (Signature of owner or owner's authorized agent)

*Підтвердження нанесеної (-их) протибростаючої (-их) системи (систем)
Endorsement of anti-fouling system(s) applied*

Тип(и) використаної(их) протибростаючої (их) систем(и) та дата(и) нанесення
Type(s) of anti-fouling system(s) used and date(s) of application

(Дата) (Підпис власника або уповноваженого агента власника)
(Date) (Signature of owner or owner's authorized agent)