IMO
INTERNATIONAL MARITIME LAW INSTITUTE
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An Act incorporating the International Convention for the Control and Management of Ships Ballast Water and Sediments into the Mauritian Legislative Framework

A Legislation Drafting Project submitted in partial fulfillment of the requirements for the award of the Degree of Master of Laws (LL.M.) at the IMO International Maritime Law Institute

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Academic Year 2009/2010

To

Andre and Lucienne Violette who have always supported me and will always be remembered.

ACKNOWLEDGEMENTS

I wish to convey my deepest thanks to the Indian Ocean Commission which has given me this formidable opportunity to carry out this postgrtaduate course and the teaching staff at the International Maritime Law Institute who have been very helpful in guiding for the completion of this project.

I also wish to thank my tutor for this project, Mr R. Maceda who have assisted me for this project and also and Ms Lilia Khodjet El Khil, Programme Officer at REMPEC.

My deepest thanks are also conveyed to the non-academic staff who have been very supportive and helpful.

Finally, I thank my parents for providing me immense support throughout these months and have given me the strength to complete this project.

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LIST OF ABBREVIATIONS

BWE	Ballast Water Exchange
BWM	Ballast Water Management
CBD	Convention on Biological Diversity
EEZ	Exclusive Economic Zone
MARPOL	International Convention for the Prevention of Pollution from Ships
MEPC	Maritime Environment Protection Committee
MSC	Maritime Security Council
IJMCL	International Journal of Marine and Coastal Law
IMO	International Maritime Organisation
INTERTANKO	International Association of Independent Tanker Owners
IUCN	International Union for the Conservation of Nature
STCW	Standards of Training, Certification and Watchkeeping Convention
UN	United Nations
UNCED	United Nations Conference on Environment and Development
UNCLOS III	United Nations Conference on the Law of the Sea
UNCLOS	United National Convention on the Law of the Sea

EXPLANATORY NOTE

INTRODUCTION

> *"All life on earth is part of a sensitive interdependent ecological system. As with every other species, humanity depends for its existence on the 'ecosystem services' provided by the interactions of the earth's species with each other and with natural process."*
> *David Hunter et al; International Environmental Law and Policy, Foundation Press, New York, 1998, p.5.*

It is said that marine pollution from ships can be either 'accidental or operational'[1]. Whilst the accidental nature of pollution is self-explanatory, the other nature encompasses various activities which are linked to ships' general operations, such as the washing of the tanks or the discharge of ballast water.

This latter example is somewhat linked to this project which deals with the International Convention for the Control and Management of Ships Ballast Water and Sediments (hereinafter referred to as 'Convention'), which has been adapted by the International Maritime Organisation ('IMO'). The latter is the only specialised agency of the United Nations, having an exclusive mandate for maritime matters and has recognised the problem posed to the environment by the introduction of harmful aquatic organisms and pathogens.

This Convention has been described as being a "pioneering treaty in breaking new technical and legal grounds towards the development of a new order of the oceans, demonstrating the evolution of the traditional concept of sovereignty into so-called cooperative sovereignty"[2]; the different aspects warranting this expression will be discussed in this work.

The Convention was adopted by consensus at a diplomatic conference convened by the IMO on the 13th February 2004. It is meant to enter into force 12 months after the ratification by 30 States, representing 35 per cent of world merchant shipping tonnage. It is also to be noted that doubts have been expressed as to whether such invasion by harmful aquatic organisms and pathogens falls within the definition of "pollution" and this issue will also be addressed in this work.

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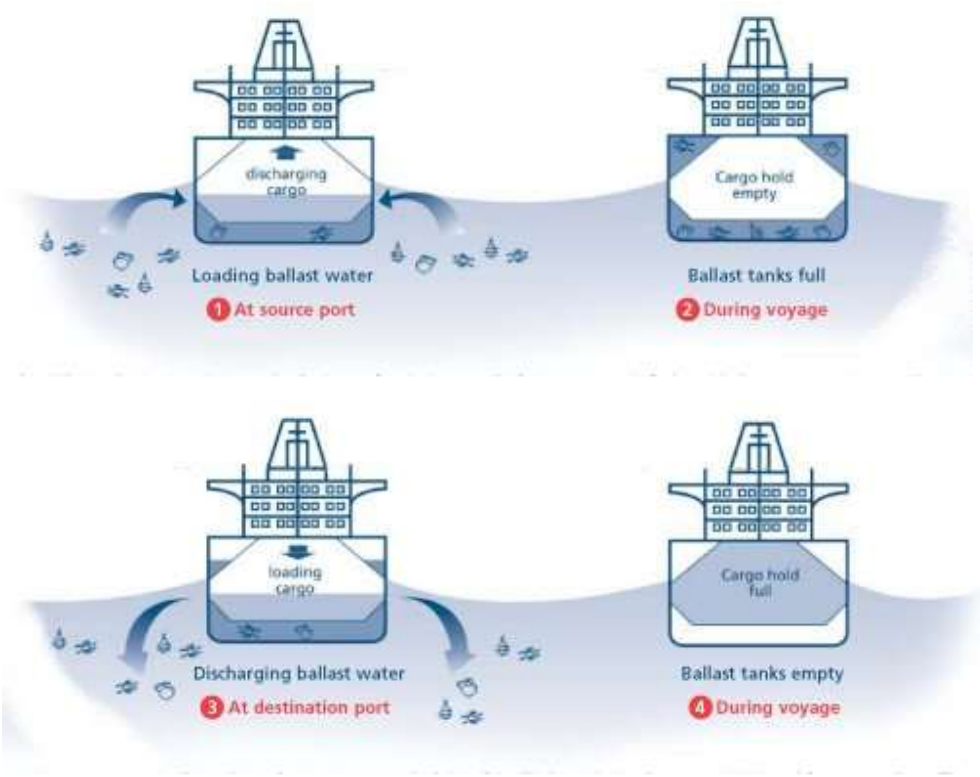
[1] Birnie P. et al; International Law & the Environment, 2009, p.399; De La Rue, C. & Anderson, C.; Shipping and the Environment, 2nd Edition, Informa, London, 2009, p.807.
[2] Fonseca de Souza Rolim, M.; The International Law on Ballast Water – Preventing Biopollution, 2008, p.144.

Since decades, a significant part of the merchant fleet have used and still continue to use[3] sea water as ballast; this is crucial for providing stability to vessels and water, compared to solid ballast, has the advantage of being readily available and easy to load. The loading/uptake and discharge of ballast water is illustrated below[4]:



However, until the 1980s, it was little realized by some or given undue importance by others that such vessels, save for cargo and passengers, were bringing along to their ports of call other 'guests': biological organisms and phytoplanktons native to other areas[5]. As marine species are not uniformly distributed across all oceans due to factors such as salinity, temperature, presence of natural barriers such as reefs, many areas contain very specific species which have evolved over the years. During the uptake of ballast water, some are loaded along the ballast waters and subsequently discharged with some species managing to survive the voyage. Since their natural predators are not likely to be present in the new ecosystems, they may thrive to such an extent that native species are overtaken in number and begin to decline, or they alter completely the

[3] Firestone, J. & Corbett, J.; Coastal and Port Environments: International Legal and Policy Responses to Reduce Ballast Water Introductions of Potentially Invasive Species, 2005 ODIL Vol. 36, No. 3, pages 291-316, p.291; Tsimplis, M.; Alien Species Stay Home: The International Convention for the Control and Management of Ships' Ballast Water and Sediments 2004, 2005 IJMCL Vol. 19, No.4, 2004, p.411-445 at p.411.

[4] <http://earthtrends.wri.org/features/view_feature.php?fid=67&theme=7> as at 05.01.10.

[5] Khee-Jin Tan, A.; Vessel–Source Marine Pollution: The Law and Politics of International Regulation, Cambridge University Press, 2006, p.169.

ecosystem[6]. The latter is especially dramatic if these species are released in semi-enclosed or enclosed[7] areas. Such changes are generally irreversible. The scope of the problem is outlined when one considers that the current estimation of 3-5 billion tons of ballast water being discharged on a yearly basis[8].

This scenario has occurred before; one of the earliest such recorded incidents dates back to 1903 when an Asian phytoplankton was found on a large scale in the North Sea, which was then not considered as its normal habitat.

Another such instance is directly linked to the collapse of the fishery stocks of anchovy kilka (*Clupeonella engrauliformis*) in the Caspian Sea. For a number of years up to 2000, this species of anchovy has been described as being the most abundant one in that area; its capture and processing supported an important commercial activity in that region. Although it is conceded that overfishing also had a major impact, it is agreed that it was the introduction of the comb jellyfish (*Mnemiopsis leidi*) to that area by ship ballast, which resulted in the anchovy kilka being almost eradicated and the jellyfish on the other hand becoming the main species there. Consequently, the food distribution patterns were changed leading to dramatic results such as the pervasiveness of algal blooms, water quality deterioration and a high level of larval mortality in anchovy kilka juveniles.

The United States ('US') are presently subjected to an infestation of a mussel species, namely, the zebra mussels (*Dreissena polymorpha*)[9], in the Great Lakes region[10]. The latter is native to the Black Sea and Caspian Sea area. The United States Geographical Survey ('USGS') believes that it was introduced in the mid-1980s via the ballast water of vessels from Europe. Unfortunately, this area is presently also encountering another threat from the recent introduction and thriving of the Asian Carp[11].

Another significant danger comes from dinoflagellates which may, when in large quantities, cause red tides which have a detrimental effect on biodiversity, health and economic activities.

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[6] Ibid; see also the Preamble of the Convention & Tsimplis, M., Alien Species Stay Home: The International Convention for the Control and Management of Ships' Ballast Water and Sediments 2004, 2005 IJMCL Vol. 19, No.4, 2004, p.411-445 at 414.
[7] Fonseca de Souza Rolim, M., p.2.
[8] Guidelines for National Ballast Water Status Assessment, GloBallast Monograph Series No.17, IMO, 2009.
[9] De La Rue, Colin & Anderson, Charles B., Shipping and the Environment, 2nd Edition, Informa Edition, London 2009, p.850.
[10] Mac Dougall, L. et al.; 'Marine Invasive Species in North America: Impacts, Pathways and Management'; Ocean Yearbook 20, Transnational Publishers Ltd, New York, Chircop, A., Coffen-Smout, S. & McConnell, M. (ed.), 2006, p. 435.
[11] The Chicago Tribune < http://archives.chicagotribune.com/2009/dec/22/local/chi-asian-carp-suit-22-dec22 > as at 23.01.10.

The consensus in all the above examples is that the invasive species have been removed from their natural habitats by being 'carried' by vessels, i.e. ballast waters. Moreover, sediments which are found in the bottom of the ships' holds provide a viable substratum for organisms such as dinoflagellates, which can therefore survive and be dispersed into new ecosystems upon clean-up in the sea.

The danger arising from these alien aquatic organisms and pathogens is that they consume the oxygen and plankton the indigenous species rely on for their survival and have the unfortunate tendency to multiply at a very fast rate due to the high probability that their natural predators are not present in that new environment[12]. Serious risks are therefore posed to the ecological system in coastal areas (likely to be already fragilised due to pollution and upon such an onset). Consequently, any actual rapid propagation of an alien species may be the death knell for some species of plants, coral or fish.

Eminent specialists in this field such as Erkki Leppakosk[13], have concluded that once an alien species is thriving in one region, it is "not realistic" to take measures to eradicate it. This is actually the problem being faced in the Great Lakes region in the US where the costs of cleaning and maintenance of the areas surrounding the Great Lakes together with the installations and pipelines are going exponentially without much effect on the propagation of the mussel. The same can be said for the American comb jelly, it brought about the near extinction of anchovy and sprat fisheries in abovementioned areas.

Consequently, the realistic approach would be to concentrate on prevention rather than restoration. Such an approach is the essence of the precautionary principle which has been formally adopted by the IMO in its Resolution 67(37)[14] in the 1980s and is also reflected in article 192 of the United Nations Convention on the Law of the Sea ('UNCLOS'). It is therefore not surprising for the IMO to have sought its insertion in this Convention. The gist of the precautionary approach, as succinctly put by M. Fonseca de Souza Rolim[15], is that in the advent of uncertainty, it is better to take preventive measures to avoid any materialization of the identified risk, especially when one considers the seemingly impossibility of returning the infested ecosystems to their former condition as noted above. It was first referred to by the German Federal Government[16] which sought to take action despite scientific uncertainty in 1976:

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[12] Supra n.10, p.442.
[13] Supra n.2, Chapter 2.
[14] Guidelines in the Incorporation of the Precautionary Approach in the Context of Specific IMO activities.
[15] Supra n.5, p.68; see also Molenaar, E. J.; Coastal State Jurisdiction over Vessel-Source Pollution, International Environmental Law and Policy Series Vol. 51, Kluwer Law International 1998, p. 45; Supra n.6, p.445; see also Hunter, D. et al; International Environmental Law and Policy, Foundation Press, New York, 1998, p.343.
[16] *The Vorsorgeprinzip in West German Environmental Policy*, 12th Report of the Royal Commission on Environmental Pollution, HMSO, 1988

> *Environmental policy is not fully accomplished by warding off imminent hazards and the elimination of damage which has occurred. Precautionary environmental policy requires furthermore that natural resources are protected and demands on them made with care.*

In a nutshell, David Freestone refers to it as a "better safe than sorry"[17] approach.

The prominence of the precautionary principle in the international fora is clear due its inherent characteristic[18] - it can generally be interpreted in a widely different manner and also indirectly challenges science in a way as it seeks to protect despite the apparent lack of information. It has arguably become a principle of international customary law subsequent to its express adoption at the United Nations Conference on Environment and Development ('UNCEP') and the Climate Change and Biodiversity Conventions respectively.

The relevance of this principle to the Convention can be seen from its Preamble[19]. The consequences of adopting this principle are that the States are to approach the different threats in a "holistic/comprehensive"[20] manner encompassing the whole ecosystem. Moreover, it effectively reverses the burden of proof as it is the person(s) promoting a certain activity or installation who have to show that these would not be harmful on the environment.

Through this Convention, the IMO aims at reducing the risks of propagation of harmful aquatic organisms and pathogens caused by deballasting and the Convention is presently open for signature and ratification. Being given the importance of merchant navigation to the world economies, particularly by the transport of their energy sources such as oil, the IMO has sought to tackle this issue on a very pragmatic basis. It has had to find a compromise between the "colliding interests"[21] of maritime trade and protection of the environment. It would appear that the shipping industry has adhered to this as at the beginning of February 2010, it has been announced that the first major contract for Ballast Water Management System for large ships has been agreed[22].

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[17] Freestone, D. & Hey, E. (ed.); The Precautionary Principle and International Law – The Challenge of Implementation, Kluwer Law International London, Volume 31, International Environmental Law and Policy Series,1996, p.20.

[18] Cameron, J. & Wade-Gery, W.; "Addressing Uncertainty: Law, Policy and the Development of the Precautionary Principle" *CSERGE Working Paper* GEC, 1992-43, p.1.

[19] In line with principle 15 of the Rio Declaration – UN Doc.A/CONF.151/26(Vol.I)(1992); Tsimplis, M., p.414.

[20] McConnell, M., GloBallast Legislative Review, Final Report 2002, GloBallast Monograph Series No.1, 2002, p.10.

[21] Keselj, T.; Port State Jurisdiction in Respect of Pollution from Ships: The 1982 United Nations Convention on the Law of the Sea and the Memoranda of Understanding, 1999 ODIL Vol. 30, No. 2, p.127.

[22] Maritime Today, 02.02.2010 - Major ballast water management system contract, marinelink.com, Tuesday, February 2, 2010 < http://marinelink.com/News/Article/Major-Ballast-Water-Management-System-Contract/333211.aspx >

ACTIONS TAKEN BY THE IMO

In the 1970s, the IMO started working on the impact of harmful aquatic organisms and pathogens released by ballast water and it adopted during an international Conference on Marine Pollution, a Resolution 18 on October 31, 1973[23]. The IMO's Marine Environment Protection Committee ('MEPC') also worked on this issue with the assistance of States such as Canada and Australia amongst others, which presented research material. The aim was to prepare international rules. In 1981, Resolution A.495(XII) was adopted which dealt with guidelines specifically designed for oil tankers ballast water disposal.

Thereafter, the MEPC adopted at its 31st session in 1991, Resolution MEPC 50(31) which contained non-binding Guidelines for Preventing the Introduction of Unwanted Organisms and Pathogens from Ships' Ballast Waters and Sediment Discharges. Then, in 1993, the IMO adopted these guidelines in a resolution[24], prompted by the requests from State parties at the United Nations Conference on Environment and Development ('UNCED'). The MEPC and the Maritime Security Committee ('MSC') of the IMO were also requested to continue reviewing the guidelines to ultimately develop internationally applicable, legally-binding provisions. There was the possibility that this could take the form of an additional annex to the International Convention for the Prevention of Pollution from Ships ('MARPOL')[25]. These 2 committees reviewed the previous guidelines and subsequently, they adopted revised versions thereof in June 1997 under MEPC/Circ.329 and MSC/Circ.806. Furthermore, as indicated above, the prevention (rather than the remedial) approach in tacking biopollution cases was formally recognised by the IMO when Resolution MEPC 67(37)[26].

One salient date is November 1997 when the IMO adopted Resolution A.868(20)[27] at its 20th Assembly; this resolution contained detailed and comprehensive guidelines on ballast water management to minimize the transfer of harmful aquatic organisms and pathogens. The IMO also encouraged, through this resolution, States to "take urgent action" to implement these Guidelines. The latter contain a sizeable part of the framework which can now be found in the provisions of the Convention such as the requirement for ships to have a Ballast Water Management Plan, reception and treatment facilities in ports and the need for biological baselines surveys of the ports for date

[23] Research into the effect of discharge of ballast water containing bacteria of epidemic diseases
[24] Resolution A.774(18) - Guidelines for Preventing the Introduction of Unwanted Organisms and Pathogens from Ships' Ballast Water and Sediment Discharges.
[25] Supra n.3, p.294.
[26] Guidelines in the Incorporation of the Precautionary Approach in the Context of Specific IMO activities.
[27] Guidelines for the control and management of ships' ballast water to minimize the transfer of harmful aquatic organisms and pathogens.

collection purposes. These guidelines also urged the shipyards and classification societies to develop designs for a more environment-friendly ballast system[28]. However, the issuing of guidelines was not a perfect solution to the problem posed, this was highlighted by J. Firestone and J. Corbett, i.e. these guidelines are "nonbinding, rely[ing] heavily on the mid-ocean exchange[…] and provided little incentive for treatment innovation"[29]. Due to this, the above Resolution has also requested the adoption of a separate legal instrument for ballast water management[30].

In the meantime however, a number of States have sought to take unilateral action to counter the increasing risks posed by harmful aquatic organisms and pathogens transported by ships' ballast water.

In 1998, Australia has enacted the Ballast Water Research and Development Funding Levy Act[31] and the Ballast Water Research and Development Funding Levy Collection Act[32] which are meant to collect charges from the actors of the maritime industry to fund ballast water research and analysis thereof, amongst others.

In addition, the Federal legislature in the United States has sought to address specifically the issue of the zebra mussels by enacting the Nonindigenous Aquatic Nuisance Prevention and Control Act[33]; this is supplemented by the National Invasive Species Act 1996[34] at the level of the US Coast Guard. This enactment's scope of application has now been extended to ballast water-sourced species. L. Mac Dougall[35] notes that a real watershed occurred with President Clinton's 1999 Executive Order 11312 which has sought to set up coordination to tackle this problem and has led to the National Invasive Species Management Plan in 2001. This centralises and coordinates federal action on this issue. She does note however that the lacuna in this legislation is the lack of sufficient emphasis on ballast water as vector for invasive species. The prevailing framework consists in the National Aquatic Invasive Species Act 2003 which has expanded on the matters dealt with by the above enactments and seeks to target specifically aquatic invasive species.

Moreover, as at 2006, Canada has enacted no less than 4 enactments and 2 policies to combat infestation by non-native aquatic organisms.

Furthermore, efforts have being made at the level of other international organizations and bodies. One such instance occurred in 2005 when the Convention of

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[28] Ibid. at para.13.
[29] Supra n.3, p.294.
[30] Ibid.
[31] < http://www.austlii.edu.au/au/legis/cth/consol_act/bwradfla1998476/ > as at 05.02.10.
[32] < http://www.austlii.edu.au/au/legis/cth/num_act/bwradflca1998574/ > as at 05.02.10.
[33] Pub. L. No. 101-646, 104 Stat. 4761 (1990), codified at 16 USC $$4701-4751.
[34] < http://www/mde.state.md.us/assets/document/water/Fed_BWM_Regs.pdf > as at 05.02.2010.
[35] Supra n.10, p.455.

Biological Diversity Conference of the Parties adopted the *Jakarta Mandate on Marine and Coastal Biological Diversity*[36]; this required research and analysis to be performed on this issue[37]. Moreover, the International Association of Independent Tanker Owners ('INTERTANKO') and the International Chamber of Shipping jointly produced a Model Ballast Water Management Plan. It is also important to note that the International Union for the Conservation of Nature ('IUCN') produced a Guide to Designing Legal and Institutional Frameworks on Alien Invasive Species to assist States and the shipping industry.

The result of the above is that there has been, as per the terms used by L. Mac Dougall, a disparate, seemingly uncoordinated and piecemeal approach taken by all; the first realistic prospect of uniformity and coordination is offered by the adoption of this Convention. The latter is still to enter into force. The continuing interest of the IMO for this Convention is reflected by its recent Resolution A.1005(25) in relation to application of the standards of treatment in D2 which provides for a new deadline, i.e. the 1st of January 2012. Six pilot countries[38] are currently reviewing and analyzing the legal and administrative framework under the aegis of the Global Ballast Water Management Programme.

PURPOSE OF THE CONVENTION

The Convention aims at preventing, if not, significantly diminishing the probability of invasion in marine ecosystems by harmful aquatic organisms and pathogens from ship's ballast water. In so doing, this Convention has adopted a similar structure[39] to that of MARPOL with the general rights and obligations are embodied in 22 articles and more technical aspects being dealt with in the Annex contains, together with 17 sets of guidelines, deemed to be inseparable[40] to the articles as a whole.

The applicable standards consist essentially in the requirement for Ballast Water Exchange ('BWE') to be effected at a distance of at least 50 nautical miles from the State's baseline (the latter may also require a minimum distance of 200nm instead) with a depth of at least 200 metres (Regulation B-4). Furthermore, the BWE is to be made for at least 95% of the ballast carried and if the pumping-through method is used, this exercise

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[36] < http://www.ngo.grida.no/wwfneap/Projects/Reports/jakmand.pdf > as at 05.02.2010.
[37] Supra n.3, p.294.
[38] Brazil, China, India, Iran, South Africa and Ukraine - McConnell, M., GloBallast Legislative Review, Final Report 2002, GloBallast Monograph Series No.1, 2002.
[39] Supra n.2, p.98; see also supra n.3, p.295.
[40] Supra n.6, p.415; also art. 2(2) & 1(1) BWC.

should be made 3 times (Regulation D1). However, this exercise ought to be carried out safely and without any deviation or delay to the vessels concerned.

The State may also designate areas for the ballasting and deballasting to be effected where additional measures can be imposed. A. Khee-Jin Tan[41] notes that the "safest route" is for the approval of the IMO to be sought to establish same in view of art. 211(6) UNCLOS. The State is also to establish facilities at ports to collect and treat sediments (art. 5).

The Convention adopts a very scientific approach via Regulation D-2 (which is meant to be in force after a period of transition) which sets out specific maximum concentrations: two for "viable organisms and three for "indicator microbes"[42]. A sample from a ship which is outside the limits allowed will have to discharge its ballast water under more stringent procedures.

Regarding to the definitions, M. Fonseca de Souza Rolim[43] notes that a somewhat more restrictive definition of terms has been preferred, i.e. harmful aquatic organisms and pathogens compared to terms[44] such as 'biopollution'[45]. This view is shared by M. Tsimplis who explains this by the fact that the Convention is aimed specifically at organisms and pathogens possessing a "hazardous toxicity"[46]. However, they note that by not embracing the wide concepts, recourse is to be had, and correctly so, to other relevant legal international instruments such as UNCLOS.

Another parallel to MARPOL[47] is the adoption by the Convention of a 'not more favourable' approach towards non-member States, namely, it expressly states that the ships registered in non-signatory States are not to be treated in a more lenient manner than those from State parties. This has the advantage of promoting a uniform application of the standards set and reflects the continuing strict approach taken by the IMO. That very provision has been the subject of analysis by the IMO which concluded that coastal states are "entitled"[48] to impose such requirements on foreign ships.

Articles 1 to 22 of the Convention outline the different obligations and rights of the parties. Any ship falling within the Convention's ambit has to carry valid

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[41] Supra n.5, p.172, footnote 142.
[42] Supra n.3, p.299.
[43] Supra n.2, p.102.
[44] Supra n.2, p.101.
[45] Ibid.
[46] Supra n.6, p.415.
[47] Art. 5(4) MARPOL.
[48] Molenaar, Erik Jaap, Coastal State Jurisdiction over Vessel-Source Pollution, International Environmental Law and Policy Series, Vol. 51, Kluwer Law International, The Hague, 1998, p.119.

documentation, namely the International Ballast Water Certificate, Ballast Water Record Book and a Ballast Water Management Plan issued and approved by the flag state authority under art. 4. Any uptake or discharge of ballast water, intentional or not, is to be recorded in the Ballast Water Record Book (Appendix II) and ought to occur within not less than 50 nautical miles from the baselines of a country. The ship shall also have until the 1st of January 2012 to install an approved ballast water treatment system, pending which, it is able to use the Ballast Water Exchange method at the required distance from the shore.

Moreover, in line with the precautionary approach, States parties are to develop national policies, strategies and programmes to ensure that the aims are met; the installation of necessary facilities to clean and repair ballast tanks is also required under art.5 and State parties are to apply the relevant IMO's Guidelines whilst taking into account the need not to cause any undue delay to the ships and also to safely dispose of the sediments without posing risks to the environment, health, property.

The need to conduct training and increasing awareness of the persons engaged in the shipping industry and population is also mentioned in art. 13. Then, the State party is also required to notify the IMO of any measures and legislation put into place so that other parties are aware of same under art. 14.

Arguably, the central provisions concern the manner to dispose and take ballast water; a 'two-tier'[49] system is advocated wherein there are minimum standards applicable to all ships which want to perform any of the 2 processes and more checks and protective measures will be applicable for certain identified areas by the State.

In addition, the signatory State should promote and monitor the scientific and technical research on Ballast Water Management and need for monitoring of the said Management (art. 6.). Port States are also to conduct inspections (art. 9) and 2 types of designated areas: firstly, facilities above for the safe disposal of ballast water and secondly, areas which arguably can be beyond the territorial seas[50].

The Convention takes into consideration the inherently international aspect of shipping and this is reflected by the express requirement under art. 10, that an opportunity is to be given, at the State's discretion for the exercises in the preceding paragraph to be made with the assistance and cooperation of another signatory State, together with incidents of violations.

Violations are also dealt with under art. 9 to 12, with an outline of the measures to be in place dealing with violations of the Convention's requirements being mentioned. Other State parties are under a duty to cooperate where information is required to which it is privy and also to institute proceedings when so required. The assessment procedure

[49] Supra n.2, p.116
[50] MEPC Resolutions 45/2 & 46/3.

is given a clear ambit as the exact steps for inspection of ships are prescribed. Then, relevant State parties are to be notified appropriately under art.11 and pursuant to art. 12, it is provided that whatever action is taken by the State, it should not unduly detain the ship or delay its operations.

Methods of dispute resolution are also to be adopted. It is expressly mentioned in art.16 that this Convention does not supersede any of the rights and obligations under customary international law as mentioned in UNCLOS. The Annex deals with the management, control and imposition of standards for the obligations imposed by this Convention and comprehensive and detailed provisions are inserted to that effect.

Overall, this Convention is detailed and comprehensive with arguably a downside being the costs of implementation as regards workforce, more surveys, supervision of the maritime zones and labour, especially when dealing with a developing State. Nevertheless, being given that the costs associated with eradicating/controlling the proliferation of alien organisms are even more considerable, it is important for countries with economies relying heavily on their maritime zones and seashores for economic development to consider implementing this Convention for protection and preparedness.

NECESSITY FOR THE CONVENTION

The need for adopting this Convention will be addressed here. At the outset, it has to be highlighted that there is no other international legal instrument specifically addressing the issue of harmful aquatic organisms and pathogens carried by ballast water. This may arguably be due partly to a previous lack of public awareness to this problem past and the lack of extensive scientific data.

The starting point is UNCLOS. Being an "umbrella Convention"[51], it lays down numerous duties on States which arguably are of a general nature only such as articles 192, 194 as regards pollution; consequently, more specific international instruments are needed to address this issue. In fact, M. Fonseca de Souza Rolim[52], Jeremy Firestone & James J. Corbett[53] and A. Khee Jin-Tan have questioned the relevance of UNCLOS for dealing with harmful aquatic organisms and pathogens carried by ballast water. The latter author argues that the definition of "pollution" in art. 1(4) UNCLOS does not refer to harmful aquatic organisms and pathogens and that the "*only reference to alien species is in art. 196, which provides that control measures on alien species do not affect the*

[51] Schiano di Pepe, Lorenzo; Port State Control as an Instrument to Ensure Compliance with International Marine Environmental Obligations; International Marine Environmental Law, Kirchner, Andree (ed.) Kluwer Law International, Volume 64, International Environmental Law and Policy Series, London, 2003, p.34.
[52] Supra n.2, p.102.
[53] Supra n.3, p.298.

provisions relating to the protection of the marine environment"[54]. He therefore argues UNCLOS, more especially art. 211 (which deals with States' responsibilities on pollution from ships) cannot be related to this Convention. However, this does not appear to be the position adopted by the IMO and the MEPC who have deemed this to be a pollution-related issue as can be evidenced by the very handling of this matter by the MEPC and also the previous decision to develop it as a possible annex to the MARPOL as amended, in the mid-1980s.

As noted earlier at page 7, this lack of specific international legal instrument has led a number of countries to take unilateral action by national legislation. This unfortunately creates the imposition of different regulations which have to be considered and complied by shipowners and masters. That in turn results in further complications in their work. Being given the inherent international character of shipping, uniform and standardized rules, as aimed at by the IMO, would be more appropriate.

Other international legal instruments dealing with environmental protection such as the 1972 Stockholm Declaration and the Convention on Biological Diversity do not address this issue specifically although they do mention the importance of a precautionary approach. Birnie[55] argues that international customary law has complemented the precautionary approach by providing for two rules derived from the latin maxim '*sic utere tuo, ut alienum non laedas'*, i.e. principles of good neighbourliness'[56]:

a. "duty to prevent, reduce and control transboundary pollution and environmental harm resulting from activities within their jurisdiction or control;
b. […] duty to cooperate in mitigating transboundary environmental risks and emergencies, through notification, consultation, negotiation and in appropriate cases, environmental impact assessment"[57]

This has been recognised by the International Court of Justice in *Advisory Opinion on the Legality of the Threat or Use of Nuclear Weapons*[58] and the *Case Concerning the Gabcikovo-Nagymaros Dam*[59].

Being given the continuing risk posed by harmful aquatic organisms and pathogens and the direct results on human health, biodiversity and economic interests, an international instrument complementing[60] UNCLOS & MARPOL, is necessary. Erik

[54] Supra n.5, p.172.
[55] Supra n.2, p.137.
[56] Ibid.
[57] Ibid.
[58] Ibid. at p.139; also ICJ Reports (1996), p.226 at para.29.
[59] Ibid.; ICJ (1997) p.41 at para.53.
[60] Ibid. at p.98.

Franckx points out that unfortunately "international law relating to the protection and preservation of the marine environment is certainly one of those branches of international law which developed to a large extent in response to concrete casualties"[61]. Illustrations of this are the international instruments adopted after the Amoco Cadiz and Torrey Canyon incidents. It is therefore an urgent and necessary to consider implementing the Convention as harmful aquatic organisms and pathogens are impervious to any national boundary.

Mauritius, being a coastal, flag and port State, already has some logistical and administrative set-up for the implementation of the obligations of this Convention and would greatly benefit in terms of prevention and preparedness in adopting same.

The historical and legal background of Mauritius will be outlined in the following paragraphs.

The Mauritian background:

Mauritius has a diverse history. First discovered by Arab sailors some years before 1502, the island was named Dina Arobi, i.e. abandoned island. At around 1500, Portuguese sailors landed on the island, with some historians arguing that they were led by Domingos Fernandez, others believe it was one Diego Dias. However, it is certain that island was given the name 'Ilha do Cirne'; mention of the island was made on an ancient map by a Portuguese, Albert Cantino in 1502 & in 1508 on another one by Frenchman Jean Ruysch 1508. The island was soon abandoned.

On the 20th September 1598, Vice-Admiral Wybrandt van Warwick leading a flotilla of 5 Dutch vessels, discovered the island which was named 'Prins Maurits van Nassaueiland' as a gesture towards the then Prince of Orange, Maurits van Nassau. After a few years, Dutch forces left the island which became once again uninhabited.

The first lengthy spell of settlement on the island started at around 1715 when it was appropriated by the French and became one of its colonies. The island was renamed 'Isle de France'. The French administration set up a naval base and shipbuilding centre in the bay now known as Port Louis. During that period, the island was also used as a base by French corsairs to attack British commercial ships.

The next turning point was in August 1810 when the British forces retaliated against the acts of aggression of the French sailors and corsairs and captured the island. The

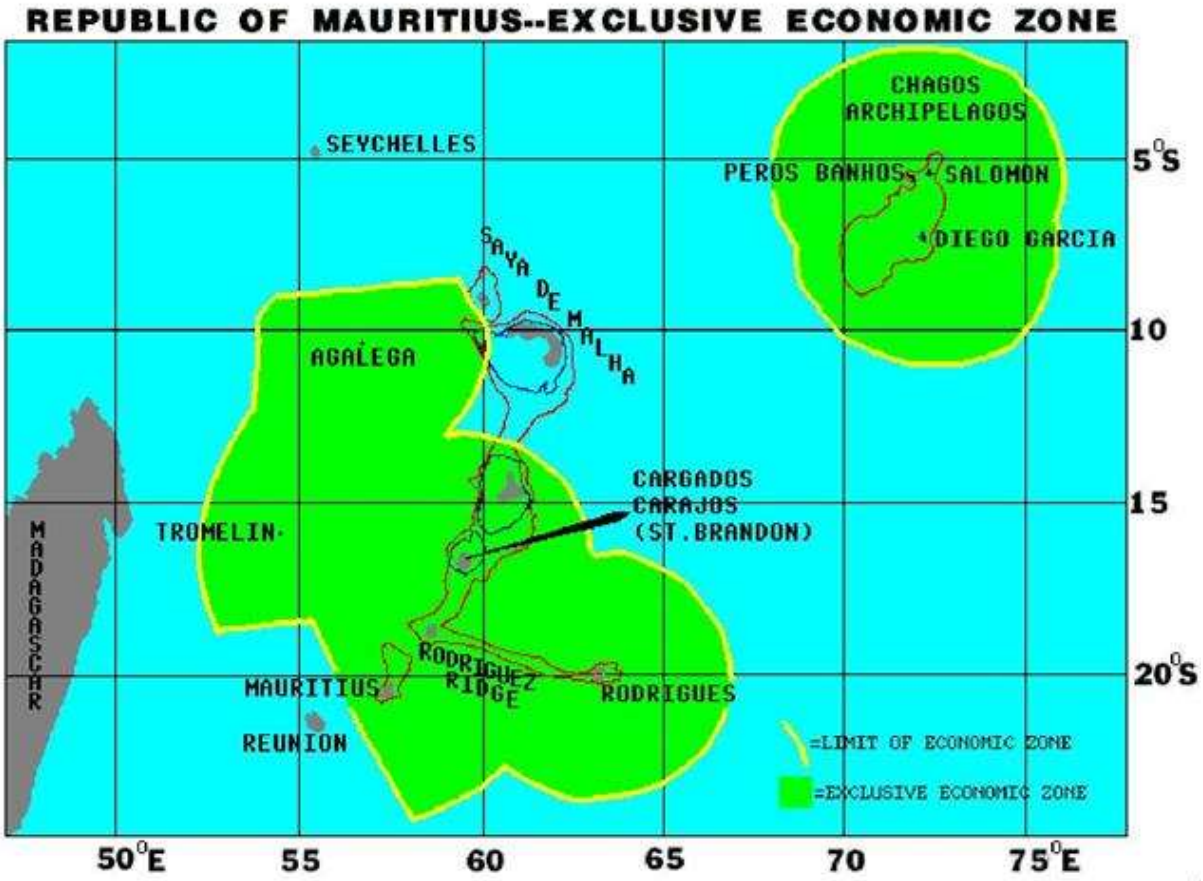
[61] Franckx, E.; 'Vessel-source Pollution and Coastal State Jurisdiction, The Work of the ILA Committee on Coastal State Jurisdiction Relating to Marine Pollution (1991 – 2000), 2001, p.2.

island was officially ceded to Great Britain in 1814 by the Treaty of Paris, however, a major concession was made by the British: the inhabitants would retain the French legal Codes, customs and language. The island was renamed Mauritius.

Under the British rule, the island thrived economically and eventually on the 12th March 1968, it attained independence. It became a republic in 1992. Since then, it has remained stable politically and become one of the most competitive economies of the African region. Reliance for its economic growth is placed on 4 major sectors: sugar cane cultivation, textile manufacturing, financial services and tourism.

Mauritius consists of a main island (with a surface area of 1865 square kilometers) and has a number of dependencies in the Indian Ocean: Rodrigues Island, Cargados Carajos, Agalega, Chagos Archipelago. Furthermore, there are ongoing disputes about sovereignty over Tromelin Island against the French government and Diego Garcia Island with the British authorities. The issue of sovereignty over Tromelin Island appears to have been resolved with an agreement to be signed by April 2010 between the Governments of Mauritius and France respectively on the dual exploitation of fisheries resources there amongst others. It has to be noted that Mauritius has claimed a contiguous zone and Exclusive Economic Zone ('EEZ') with the latter extending to over 1,600,000 square kilometers. This is illustrated as follows[62]:

[62] National Oceanographic Centre, Mauritius < http://www.nodc-mauritius.org/index.htm > as at 17.01.10.



The sea has a special importance as the country possesses no natural resource such as ores or petrol. Fishing has evolved from being subsistence-oriented to commercial, with fish farms projects being implemented and also agreements with foreign companies for fishing in the zones requiring the use of national land-based services in the main harbour, Port Louis (also the capital). One of the most sought-after fish remains the tuna and facilities are also present for its transshipment, storage and transport in the port area.

The port is administered by the Mauritius Port Authorities and has facilities to cater for a very wide range of services and vessels including bulk cargoes, container vessels and tankers. An increasing number of cruise companies are using the island for their passengers and also reconstituting their stores and bunkers. Furthermore, the Freeport has contributed to bring in more trade traffic and consequently, some shipping companies now view a stopover at Port Louis as necessary between the Asian and African market; this route is described as one of the most profitable ones especially for the feeder trade[63]. It would therefore be sensible to include the average deadweight of such vessels within the ambit of application of the proposed incorporating legislation, together with tankers.

[63] < http://www.shiplink.lk/srilanka-maps.html > as at 17.01.10.

The tourism sector relies on the increasing influx of cruise ship passengers. It is therefore of great importance for the country to keep maintaining and updating the facilities used by these industries at the port area and also ensuring that the tourism reputation and image of the country remains appealing. Environmental protection is consequently a prevailing factor.

The main enactment dealing with environmental protection problems pertaining to maritime activities is the Environment Protection Act. Although it identifies a variety of activities likely to have a harmful effect on the environment, the framework and procedure to assess any activity (Environment Impact Assessment) and seeks to provide penalties and procedures for the immediate response to such threats such as an oil spill and violation of mandatory requirements, it contains no provision on invasive aquatic species and sediments. In fact, no enactment regulates this so there is presently a lacuna in the legislative framework on biopollution by ballast water discharge and, given the increasing amount of maritime trade, the relevant authorities need to be prepared.

MANNER OF IMPLEMENTATION IN THE MAURITIAN LEGAL SYSTEM

(a) Legal background:

The Mauritian legal system is a dualist one; it retains strong links to both the British and French legal systems due to it having been a British and French colony respectively and retained the French Codes even under British rule as described above. Consequently, the Civil Code, Criminal Code, Civil Procedure Code and the Code de Commerce continue to be in force incorporating Mauritian specificities, alongside the doctrine of precedent. In addition, since gaining independence, the Mauritian Parliament has been enacting certain legislation in the British drafting tradition style, thereby creating a combination of French civil law and British aspects.

There are 3 main enactments to consider in relation to this work. Firstly, there is the Maritime Zones Act 2005 which incorporates UNCLOS into domestic law and gives its provisions the force of law; it also officially proclaims the different regimes: the continental shelf, Exclusive Economic Zone and Contiguous Zone. The overall powers of proclamation and governance on these are provided to the Prime Minister of the day.

Another important relevant legislation is the Merchant Shipping Act 2007[64] which provides a comprehensive framework for numerous provisions of international conventions which have been ratified. It deals with a wide array of issues: the load lines requirements, the limitation of liability issues, the carriage of passengers and luggage, wreck and salvage claims, maritime liens, safety and welfare of seamen, the work of the Registry of Shipping for the registration of Mauritian and chartered vessels, the enforcement powers and duties of the officers working for the Director of Shipping. Other commercial aspects are dealt with by some articles in the Code de Commerce. The Minister in charge for enactment is the one to whom shipping has been assigned.

There is also the Environment Protection Act 2002 which sets out detailed provisions on the procedure and requirements for Environment Impact Assessment for certain activities (Part IV), the national environmental standards for air, noise, hazardous waste and others (Part VI), the nomination of specially accredited laboratories to analyse the different samples and even the procedure and persons to decide on actions to be taken upon incidents threatening marine environment in the Mauritian maritime zones (Part V). As abovementioned, this work is proposing an amendment to this legislation rather than a new enactment. The new provisions and regime will thus falls under the authority of the Minister assuming the environment portfolio.

[64] which repealed the previous Merchant Shipping Act(No. 28 of 1986).

(b) Legislative process:

Enactments emanate from the Mauritian Parliament which is unicameral pursuant to section 45 of the Constitution; legislation voted in can vary from the traditional amendments or supplementation of the Civil Code, Commercial Codes, amongst others in both English and French to enactments which tally the framework of the UK Acts of Parliament. The procedure to transform a bill into an enactment also requires the assent of the President of the Republic under sections 46(1) & (2) of the Constitution and publication in the Government Gazette in accordance with section 46(4) of the Constitution.

The Attorney General's Office is responsible for drafting bills and regulations at the sole request of Ministers provided that the subject-matter falls within the ambit of their authority. Working sessions are held for instructions and details to be provided together with the input of the relevant governmental stakeholders, and in some cases, consultation with non-governmental organizations, commercial bodies and interested members of the public. Any draft bill of regulation will be reflecting the instructions given. Whilst a regulation will be generally provided to the relevant Minister who will officially issue it, as regards a bill, the latter is presented by the Attorney General, who is the principal legal adviser of the Mauritian Government as per section 69 of the Constitution, before the Cabinet of Ministers by the Attorney General. Usually, further amendments will be sought and a revised version is submitted to the Cabinet subsequently.

Once it is satisfied with the bill, the Cabinet will decide on presenting it to Parliament and similarly to the British parliamentary system, there will generally be a First, Second and Third Reading. Different voting thresholds are set depending on the type of bill presented with the most stringent being for amendments to certain provisions of the Constitution as outlined in section 47 of the Constitution.

Enactments usually contain provisions whereby certain powers to make regulations are delegated to specific persons holding relevant posts, generally the Minister in charge of the subject-area. Accordingly, a Minister so empowered is in a position to issue such regulations coming within the ambit of the provisions.

For the purpose of this work, the proposed bill will follow the British drafting style to amend the Environment Protection Act 2002 and the accompanying draft regulation will also come within the said delegated powers of the Minister.

(c) Procedure for incorporation of Conventions:

As a dualist country, the Mauritian legal context requires incorporation into the domestic law by an enactment. Without this process, although the State would still be under obligations on an international level, the domestic courts will not be able to enforce the provisions of the treaty and this may pose problems to individuals seeking protection within the ambit of these provisions as illustrated in the case of Supreme Court of Mauritius case of Jordan v/s Jordan[65] pertaining to the Vienna Convention on the Convention on the Civil Aspects of International Child Abduction to which Mauritius had acceded to. The claimant was seeking to enforce his rights provided under the Convention but as the Convention was not yet implemented through an enactment, the Supreme Court could not rely on the Convention provisions to consider the claim.

Nevertheless, mere incorporation is insufficient as the exact framework and procedure may be required to be set up; such further implementation will undoubtedly assist in achieving an effective implementation and enforcement of the provisions and further legal clarity.

OUTLINE OF THE PROPOSED LEGISLATION

In order to incorporate this Convention, a bill and a draft regulation are proposed which will also encompass the duties of Mauritius as a flag state under UNCLOS, namely the Environment Protection (Amendment) Bill and the Environment Protection (Lists of Harmful Aquatic Organisms and Pathogens) Regulations.

In a nutshell, the UNCLOS-related duties are to ensure that ships flying their flags are complying with international standards and national laws for the prevention, reduction and control of marine pollution. They are to provide for surveys and certificates as to their compliance with international standards on design, construction, equipment and manning, and take legal action in respect of any alleged violations reported to them. The penalties are meant to be "adequate in severity to discourage violations wherever they occur"[66].

The main hurdle of this bill resides in the different regimes which may be dealt by different ministers and ministries altogether. Whilst the traditional Port State Control activities fall under the authority of the Director of Shipping and consequently the ministry dealing with shipping, the environmental aspects are to be overseen by the Minister in charge of the environment. This illustrates the holistic or ecosystem approach that is required for addressing environmental issues.

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[65] 2006 SCJ 32.

[66] Supra n.9, p.1052 – art.217(4)-(8).

Accordingly, being given that there is a comprehensive environmental legislative framework under the Environment Protection Act 2002, the latter will be amended by adding one Part which will incorporate the Convention and also identify the main bodies which will be responsible for implementing the requirements and ensuring that there is compliance. An interaction between the different actors is necessary with the Prime Minister being empowered to designate the special deballasting areas in the Mauritian waters, the Director of Shipping, the Registry of Shipping and the Minister of Environment. The duties of the flag State to issue and endorse the International Ballast Water Certificate, conduct surveys to that effect and also approve Ballast Water Management Plans amongst others, are also dealt with. The powers of the officers whilst a ship is in a port or offshore terminal are also detailed together offences, penalties and regulations.

The proposed bill will be given the force of law pursuant to section 71 and will contain provisions empowering different agencies such as the Registry of Shipping, the department of the Director of Shipping who is in charge of Port State Control and any officers designated by the Minister in charge of the Environment aspect, to perform the obligations required under the Convention at sections 79 and 89.

In addition, the Minister shall be able to issue regulations to ensure the proper implementation of this the proposed bill under section 78 and will be designating special areas for the ships to perform ballasting and deballasting, after consultation with the relevant governmental actors. Section 80 also enables the Minister in charge of the environment portfolio to make exemptions for certain ships in line with the Convention. Monitoring of the areas to prevent any surge in invasive aquatic organisms and pathogens will be effected by the National Environmental Laboratory which is already set up under the Environment Protection Act 2002; this will reflect the compliance of the State also to the qualitative and quantitative assessments required under art. 200 UNCLOS.

Sections 72 to 74 detail the different documents that will be required to be issued and made available for inspection at all time on board Mauritius-registered ships and also ships coming within the ambit of this Convention.

Moreover, section 81 expressly acknowledges the ability of a shipowner/operator to sue the relevant government departments for damages arising out of delay related to inspections. Being given that the potential defendant will be governmental, the prevailing conditions for suing the State and public servants under the Public Officers Protection Act are maintained. This enactment effectively sets out a time limitation to bring actions against a governmental department or officer and also the causes of action that can be proceeded with.

Section 83 seeks to simplify the evidential burden faced in any criminal proceeding by displacing to some extent the hearsay rule – it is modelled on section 181 of the Courts Act[67] and aims at ensuring that any valid International Ballast Water Certificate be capable of production in court without the need to call an officer from the (foreign) Administration which issued it unless challenged.

Although a penalty section has been inserted as section 88, there is also a power to request the vessel to depart from the State's jurisdiction under section 78. The penalties involved do not include any imprisonment term (art. 89.3), thereby being in line with the governing principle advocated in UNCLOS.

The draft regulation seeks to enable the Minister in charge to make a list of harmful aquatic organisms and pathogens to specifically target and also update this list on a regular basis. It is suggested that having these lists in regulation form is advantageous as it enables a more rapid amendment or addition than a proposed bill amendment.

Overall, it is suggested that the combination of the 2 drafts will enable the basic structure to be set up to implement the Convention, if approved by Parliament.

[67] Act No. 41 of 1945, as amended; s.181 caters similarly for other documents emanating from governmental departments.

Conclusions:

There is presently an urgent need for international regulation of ballasting exercises by ships so as to prevent the propagation of harmful aquatic organisms and pathogens (such pathogens usually contained in the ships' sediments). Such action is required due to the risks of irreversible damage that can result therefrom as illustrated by the examples at page 3 above.

The IMO has taken on a very significant task via this Convention as it is one which deals with numerous technical aspects. In fact, the IMO will have a more prominent administrative role than in preceding conventions as noted by J. Firestone and J. Corbett[68]: there are no less than 10 instances where the IMO is required to issue guidance in relation to this Convention. Then, a resolution was adopted inviting the IMO to provide such guidance "as a matter of urgency"[69]. Accordingly, such heightened role is unprecedented on the organisation's part and increases its original ambit of operation from a negative perspective, that of pollution prevention to a positive duty, biodiversity protection[70]. This therefore lends support to the contention that this Convention is 'groundbreaking'.

Whilst M. Fonseca de Souza Rolim notes that the introduction of harmful invasive organisms and pathogens does not fall squarely within the ambit of prevention of pollution within UNCLOS, such argument is merely academic as the IMO has the support of State Parties and Members of the IMO for the adoption of this Convention and also the fact that the law is not a rigid instrument but evolves with time and contemporary issues and it is clear that the prevention of the invasion of such organisms and pathogens falls within the spirit of UNCLOS.

[68] Supra n.3, p.295.
[69] Ibid. at p.295.
[70] Ibid. at p.298.

ENVIRONMENT PROTECTION (AMENDMENT) BILL 2010

ACT No. [ ] of 2010

Proclaimed by [Proclamation No. of 2010] w.e.f. 2010.

I assent

SIR ANEROOD JUGNAUTH
President of the Republic

30th March 2010

ARRANGEMENT OF SECTIONS

Section

An Act

To amend the Environment Protection Act 2002

ENACTED by the Parliament of Mauritius, as follows –

1. Short title

This Act may be cited as the Environment Protection (Amendment) Act 2010.

2. Interpretation

In this Act –

"Principal Act" means the Environment Protection Act 2002.

3. Renumbering existing sections 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100 of the principal Act.

The Principal Act is amended by renumbering the existing sections 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100 of the principal Act as sections 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120 respectively.

4. New sections 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89 inserted in the principal Act.

The principal Act is amended by inserting after section 69A under Part XI, the following new sections:

"70. Interpretation

(1) In this Part –

"Administration" means the Registry of Shipping as under the Merchant Shipping Act 2009;

"Articles" means the Articles of the Convention;

"Authority" means the Department of the Director of Shipping;

"Ballast water" means water with its suspended matter taken on board a ship to control trim, list, draught, stability or stresses of the ship;

"Ballast Water Management" means mechanical, physical, chemical, and biological processes, either singularly or in combination, to remove, render harmless, or avoid the uptake or discharge of Harmful Aquatic Organisms and Pathogens within Ballast Water and Sediments;

"Ballast Water Management Plan" has the same meaning as in Article 1 of the International Convention for the Control and Management of Ships Ballast Water and Sediments;

"Ballast Water Record Book" has the same meaning as in Article 1 of the International Convention for the Control and Management of Ships Ballast Water and Sediments;

"Convention" means the international Convention for the Control and Management of Ships Ballast Water and Sediments;

"Director" means the Director of Shipping as under the Merchant Shipping Act 2007;

"Government ship" means a ship owned by the Government of the Republic of Mauritius or held by a person on behalf of, or for the benefit of, the Government of the Republic of Mauritius;

"Gross tonnage" means the gross tonnage calculated in accordance with the tonnage measurement regulations contained in Annex I to the International Convention on Tonnage Measurement of Ships, 1969 or any successor Convention and the Merchant Shipping Act 2007;

"harmful aquatic organisms and pathogens" means aquatic organisms or pathogens which, if introduced into the sea including estuaries, or into fresh water courses, may create hazards to the environment, human health, property or resources, impair biological diversity or interfere with other legitimate uses of such areas;

"International Ballast Water Certificate" has the same meaning as 'certificate' in Article 1 of the International Convention for the Control and Management of Ships Ballast Water and Sediments;

"international voyage", except in Sub-Part II of Part V, means a voyage from Mauritius to a port or other place outside Mauritius or a voyage to Mauritius from such a place;

“laboratory” means the National Environmental Laboratory;

“master” includes every person, other than a pilot, who has the command or charge of a ship;

“Mauritius ship” means a ship holding a valid registration with the Registry of Shipping of Mauritius;

“Mauritius waters” means any waters where Mauritius has jurisdiction in respect of the protection and preservation of the marine environment within the meaning of the Maritime Zones Act 2002;

“Minister” means the Ministry having responsibility for the subject of the environment;

“naval vessel” means a warship or troop ship;

“officer” means a public officer at the Ministry assuming responsibility for the Environment, Shipping and working under the Director of Shipping;

“Organisation” means the International Maritime Organisation;

“outer islands” means the islands comprised in the State of Mauritius as, other than the Islands of Mauritius and Rodrigues;

“owner” means the owner of a registered ship, who can includes a partnership, ‘société’, association or other body of persons which is a business entity;

“Party” means a State which is a party to the Convention;

“Principal Act” means the Environment Protection Act 2002;

“sediments” means matter settled out of Ballast Water within a ship;

"ship" means a vessel of any type whatsoever operating in the aquatic environment and includes submersibles, floating craft, floating platforms, floating storage units and floating production, storage and off-loading units production.

(2) Unless otherwise expressly provided, words and expressions defined in the International Convention for the Control and Management of Ships Ballast Water and Sediments and used in this Act shall have the same meaning as in the International Convention for the Control and Management of Ships Ballast Water and Sediments.

71. Scope of application

(1) The Articles set out in Schedule 1 shall have the force of law in Mauritius and nothing in this Act, save where expressly specified, shall be construed in a manner contrary to the Articles of the Convention.

(2) Save as expressly provided under subsection (3), this Act shall apply to:

(a) ships of at least 400 gross tons entitled to fly the flag of a Party; and/or

(b) ships not entitled to fly the flag of a Party but which operates under the authority of the corresponding Administration of a Party;

(3) This Act shall not apply to:

(a) ships not designed or constructed to carry Ballast Water;

(b) ships flying the Mauritius flag which only operate under the jurisdiction of Mauritius, subject to the decision of the Administration under section 80 of this Act;

(c) ships flying the Mauritius flag which only operate in waters under the jurisdiction of another Party, subject to the authorization of that Party;

(d) ships only operating in Mauritius waters and on the high seas, except for ships not granted an authorization under subsection (c) and s.80;

(e) any warship, naval auxiliary;

(f) any ship owned and operated by Mauritius and used only for non-commercial service; or

(g) permanent Ballast Water in sealed tanks on ships that is not subject to discharge.

(4) The requirements set out in the above subsections shall apply irrespective of the flag flown by a ship whilst it is in Mauritius waters.

(5) The Minister may, after consultation with the Prime Minister and the Director of Shipping, issue regulations to provide that an object designed or adapted for use at sea is or is not to be treated as a ship for the purposes of this Act.

72. Surveys and International Ballast Water Certificate

(1) The Administration shall be responsible to ensure compliance with the requirements of this section and shall be entitled to issue and/or endorse an International Ballast Water Certificate upon satisfaction of the criteria set out in this Act and any Regulations.

(2) The International Ballast Water Certificate shall be in the form prescribed in the Second Schedule and shall be issued or endorsed in compliance with Regulations valid for a period of 5 years as from the date of issue, unless otherwise decided by the Administration.

(3) Mauritius ships of 400 gross tonnage and above to which this Act applies shall be subject to surveys as decided by the Minister after consultation with the Director of Shipping and Administration.

(4) The owner of the Mauritius ship falling within the ambit of this Act shall have the duty to ensure that his ship is issued with a valid International Ballast Water Certificate.

(5) The owner of any Mauritius ship having a valid Certificate shall be required to notify the Administration, without delay, of:

(a) any major change being made to the ballast water treatment onboard the ship; or

(b) any incident or defective operation which impairs the operation of the Ballast Water Management Plan or Ballast Water Management System on board.

(6) The Administration reserves its right to require a survey pursuant to the occurrence of any incident described in subsection (5) and in any other case where it deems fit to do so.

(7) The Administration shall be entitled to delegate the following exercises to any competent classification society as regards any Mauritius ship falling within the ambit of this Act and any Regulations:

(a) surveying the ship to examine compliance of the ballast water treatment apparatus on board with the requirements of this Act; and/or

(b) evaluating the Ballast Water Management Plan of the ship.

(8) Notwithstanding the above, the Administration shall be the sole authority empowered to:

(a) issue the International Ballast Water Certificate; and

(b) approve the Ballast Water Management Plan.

(9) The Administration may, at the request of the corresponding Administration of a Party to the Convention, cause a non-Mauritius ship which is within Mauritius waters to be surveyed or inspected for the purpose of ensuring compliance with the provisions of the Convention.

(10) For the purpose of this Act, a Certificate issued or endorsed by the corresponding Administration of a Party for the relevant period shall be deemed as valid for the purpose of compliance with this section of this Act.

73. Ballast Water Management Plan

(1) Subject to section 2, the owner of each Mauritius ship shall ensure that his ship has a Ballast Water Management Plan approved by the Administration.

(2) The Ballast Water Management Plan shall be in compliance with Regulation B-1 of the Annex to the Convention.

74. Ballast Water Record Book

(1) Each Mauritius ship to which this Act applies shall have onboard a Ballast Water Record Book that may be an electronic record system or that may be integrated into another record book or system and which shall contain at least the information specified in Appendix II of the Convention and in compliance with Regulation B-2 of the Annex to the Convention.

(2) The Ballast Water Record Book entries shall be maintained on board the ship for a minimum period of two years after the last entry has been made and thereafter in the owner's control for a minimum period of three years.

(3) The master or if absent, the person in charge of the operation of the ship, shall ensure that entries are made in the Ballast Water Record Book of any intentional or accidental uptake or discharge of ballast water in compliance with Regulation B-3.3, B-3.5 and B-4 of the Annex to the Convention.

(4) The Ballast Water Record Book shall be kept readily available for inspection at all reasonable times and, in the case of an unmanned ship under tow, may be kept on the towing ship.

(5) In the event of the discharge of ballast water pursuant to Regulations A-3, A-4 or B-3.6 or in the event of other accidental or exceptional discharge of ballast water not otherwise exempted by this Act and Convention, an entry shall be made in the Ballast Water Record Book describing the circumstances of, and the reason for, the discharge.

(6) Each operation concerning ballast water shall be fully recorded without delay in the Ballast Water Record Book and shall be in compliance with para. (5) of Regulation B-2 of the Annex to the Convention.

75. Ballast Water Management

(1) All ships requiring Ballast Water Management shall be in compliance with Regulation B-3 of the Annex to the Convention

(2) The owner and master of a ship subject to this Act shall ensure that training has been dispensed to the officers and crew on the implementation of the Ballast Water Management applicable and the Ballast Water Management Plan.

(3) Ships performing Ballast Water Exchange shall be required to comply with Regulation D-1 of the Annex to the Convention.

76. Ballast Water Management system

(1) The Administration shall approve Ballast Water Management systems under this Act.

(2) Ships conducting Ballast Water Exchange shall comply with the requirements in Regulation D-1 of the Annex to the Convention.

(3) Ships conducting Ballast Water Management in accordance with Regulation D-2 shall discharge not less than 10 viable organisms per cubic metre greater than or equal to 50 micrometres in minimum dimension and less than 10 viable organisms per mililitre less than 50 micrometres in minimum dimension and greater than or equal to 10 micrometres in minimum dimension and discharge of the indicator microbes shall not exceed the concentrations specified in the Fourth Schedule.

(4) The Minister shall consult the laboratory and the Director of Shipping, every 8 months for the purpose of reviewing the indicators in the Fourth Schedule.

77. Removal of sediments

(1) The Minister, after consultation with the Director of Shipping, shall designate the ports and terminals where cleaning or repair of ballast tank and adequate facilities for the reception of sediments can be made taking into account the Guidelines developed by the Organisation, which:

(a) shall operate without causing undue delay to ships; and

(b) shall provide for the safe disposal of such sediments that does not impair or damage their environment, human health, property or resources or those of other States.

(2) No removal or disposal of sediments in Mauritius waters shall be made unless in compliance with Regulation B-5 of the Annex to the Convention.

(3) Subject to the facilities provided under paragraph (1) are alleged to be inadequate, the Organisation shall be notified of same for transmission to the other parties to the Convention.

78. Nomination

(1) The Minister shall, after consultation with the Director of Shipping, appoint such officers and surveyors as may be necessary for the proper discharge of the functions and duties under this Act.

(2) The officers shall be public officers and shall be under the administrative control of the Minister.

79. Checks at ports and terminals

(1) Any ship, including one not flying the Mauritius flag, to which this Act applies, may be subject to inspection by officers duly authorized for the purpose of determining whether the ship is in compliance with this Act in any port or offshore terminal under the Mauritius jurisdiction.

(2) Except as provided in subsection (3), any such inspection is limited to:

(a) verifying that there is onboard a valid International Ballast Water Certificate, which, if valid, shall be accepted; and

(b) inspection of the Ballast Water Record Book; and/or

(c) a sampling of the ship's ballast water, carried out in accordance with the guidelines to be developed by the Organisation, if any.

(3) The time required to analyse the samples under subsection (2)(c) shall not be used as a basis for unduly delaying the operation, movement or departure of the ship.

(4) Where a ship does not carry a valid International Ballast Water Certificate or there are clear grounds for believing that:

(a) the condition of the ship or its equipment does not correspond substantially with the particular of the International Ballast Water Certificate; or

(b) the master of the crew are not familiar with essential shipboard procedures relating to Ballast Water Management, or have not implemented such procedures;

a detailed inspection may be carried out.

(5) Subsections (3) and (4) shall also apply to ships other than Mauritius ships, falling within the ambit of this Act, whilst in Mauritius jurisdiction.

(6) If the sampling taken under subsection (1)(c) leads to a result, or supports information received from another port or offshore terminal, indicating that the ship poses a threat to the environment, human health, property or resources, the authorized officers shall prohibit such ship from discharging ballast water until the threat is removed.

(7) The officers shall be entitled to inspect a ship when it enters the ports or offshore terminals under the Mauritius jurisdiction, if a request for an investigation is received from any Party, together with sufficient evidence that a ship is operating or has operating in violation of a provision of this Act.

(8) Pursuant to an inspection or any action carried out under subsection (6), the Administration shall send a report of such investigation to the Party requesting it and to the competent authority of the Administration of the ship concerned so that appropriate action is taken.

80. Uptake and discharge of ballast Water.

(1) Save for subsections (2) to (5), the owner and/or master of a ship shall ensure that the uptake and discharge of ballast water is in compliance with the Ballast Water Management and the provisions of this Act.

(2) Subject to subsections (3) and (4), the Administration may grant exemptions to any requirements to apply Regulations B-3 or C-1 in the Annex to the Convention, in addition to other exemptions contained elsewhere in this Convention, but only where they are:

(a) granted to a ship or ships on a voyage or voyages between specified ports or locations; or to a ship which operates exclusively between specified ports or locations;

(b) effective for a period of no more than five years subject to intermediate review;

(c) granted to ships that do not mix Ballast Water or Sediments other than between the ports or locations specified in paragraph 1.1; and

(d) granted based on the Guidelines on risk assessment developed by the Organization.

(2) Exemptions granted pursuant to subsection (2) shall not be effective until after communication to the Organization and circulation of relevant information to the Parties are made.

(3) Any exemptions granted under this section shall not impair or damage the environment, human health, property or resources of adjacent or other States and any State that the Administration determines may be adversely affected shall be consulted, with a view to resolving any identified concerns.

(4) Any exemptions granted under this regulation shall be recorded in the Ballast Water Record Book.

(5) Any exemption in relation to subsection (2), shall only apply to Mauritius waters.

(6) Pursuant to Regulation A-3 of the Annex to the Convention, this section shall not apply to

(a) the uptake or discharge of Ballast Water and Sediments necessary for the purpose of ensuring the safety of a ship in emergency situations or saving life at sea; or

(b) the accidental discharge or ingress of Ballast Water and Sediments resulting from damage to a ship or its equipment:

(i) provided that all reasonable precautions have been taken before and after the occurrence of the damage or discovery of the damage or discharge for the purpose of preventing or minimizing the discharge; and

(ii) unless the owner, Company or officer in charge wilfully or recklessly caused damage; or

(c) the uptake and discharge of Ballast Water and Sediments when being used for the purpose of avoiding or minimizing pollution incidents from the ship; or

(d) the uptake and subsequent discharge on the high seas of the same Ballast Water and Sediments; or

(e) the discharge of Ballast Water and Sediments from a ship at the same location where the whole of that Ballast Water and those Sediments originated and provided that no mixing with unmanaged Ballast Water and Sediments from other areas has occurred. If mixing has occurred, the Ballast Water taken from other areas is subject to Ballast Water Management in accordance with this Annex.

(6) The Administration, after taking into account guidelines developed by the Organisation, shall issue measures for equivalent compliance for pleasure craft used solely for recreation or competition or craft used primarily for search and rescue, less than 50 metres in length overall, and with a maximum ballast water capacity of 8 cubic metres as per Regulation A-5 of the Annex to the Convention.

81. Claim as a result of undue detention or delay

Nothing in this Act shall prejudice the rights of the owner or master to claim compensation for any loss or damage suffered as a result of undue detention or delay under section 79(2) but any such claims shall have to be in accordance with the Public Officers Protection Act[71].

82. Notification

(1) The Minister shall, after consultation with the laboratory and the Director of Shipping, report to the Organisation and where appropriate including upon any change being made, to the competent Administrations of other parties the following information:

(a) any requirements and procedures relating to Ballast Water Management including its laws, regulations and guidelines for implementation of this Act;

(b) the availability and location of any reception facilities for the environmentally safe disposal of ballast water and sediments; and

(c) any requirements for information from a ship which is unable to comply with the provisions of Regulations A-3 and B-4 of the Annex to the Convention.

(2) The Minister shall review the information under subsection (1) for the purpose of reporting in consultation with the accredited laboratory and the Director of Shipping, at least every 9 months.

(3) In addition to subsection (2), the Minister may require a review to be effected whenever he deems it fit to do so.

[71] Act 45 of 1957.

83. Certificates of competent administrations of Parties as evidence[72]

In all proceedings before any Court or before any person authorized by law, or by the consent of parties to hear, receive and examine evidence, a certificate emanating from an officer of the competent administration of any Party shall be sufficient evidence of the fact stated therein stated without proof of the handwriting of such officer unless the Court or such person authorized as aforesaid decides that the attendance of the officer is necessary.

84. Ballast Water Management for ship constructed before 2009

(1) Mauritius ships constructed before 2009 and having a ballast water capacity of less than 1500 cubic metres and more than 5000 cubic metres, shall be required to conduct Ballast Water Management under Regulation D-1 or D-2 of the Convention until 31.12.2016.

(2) As from 01.01.2017, ships covered in subsection (1) shall be required to conduct Ballast Water Management solely in compliance with Regulation D-2 of the Convention.

(3) Mauritius ships constructed before 2009 and having a ballast water capacity ranging between 1500 cubic metres and 5000 cubic metres shall be required to conduct Ballast Water Management under Regulation D-1 or D-2 of the Convention until 31.12.2014.

(4) As from 01.01.2015, ships covered in subsection (3) shall be required to conduct Ballast Water Management solely in compliance with Regulation D-2 of the Convention.

85. Ballast Water Management for ships constructed in or after 2009[73]

(1) Mauritius ships constructed in or after 2009 and having a ballast water capacity of less than 5000 cubic metres shall be required to conduct Ballast Water Management under Regulation D-2 of the Convention.

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[72] This corresponds to the approach taken for the direct production of such certificates from public officers under s.181 of the Courts Act, so as not to delay proceedings.

[73] Implementing Resolution A.1005(25)

(2) Mauritius ships constructed as from 01.01.2009 to 31.12.2012 and having a ballast water capacity equal to or more than 5000 cubic metres shall be required to conduct Ballast Water Management under Regulation D-1 or D-2 of the Convention until 31.12.2016.

(3) As from 01.01.2017, ships covered in subsection (2) shall be required to conduct Ballast Water Management solely in compliance with Regulation D-2 of the Convention.

(4) Mauritius ships constructed in or after 2012 and having a ballast water capacity equal to or more than 5000 cubic metres shall be required to conduct Ballast Water Management in compliance with Regulation D-2 of the Convention.

86. Discharge of ballast water and designated areas

(1) Save for ships equipped with Ballast Water Management systems mentioned in Schedule Two and subsection (2), no ship shall discharge ballast water within Mauritius waters.

(2) The Prime Minister shall, after consultation with the Minister, Director of Shipping and the laboratory, designate special ballasting areas within the Mauritius waters, where ships may discharge ballast water.

(3) The above designation will be effective as from the date of publication in the Government Gazette or as on the date prescribed in the publication, whichever is applicable.

(4) The accredited laboratory shall be responsible for monitoring the presence and concentration of aquatic organisms and pathogens in ports and in those designated areas and submit a report to the Prime Minister every 6 months as from the designation of each special ballasting area.

(5) The Prime Minister shall be entitled to revoke the designation of a special ballasting area made under subsection (2) and implement contingency plans after consultation with the Minister, Director of Shipping and the laboratory, upon the finding of the increasing presence of a harmful organism or pathogen.

(6) It shall not be a breach of subsection (1) above if the master or owner of the ship proves that the ballast water was discharged in the Mauritius waters due to an event beyond the master and crew's control despite reasonable efforts on their part.

87. Regulations

The Minister may, after consultation with the Director, make such regulations as he thinks fit for the purpose of implementing the Convention contained in this Act.

88. Offences

(1) A master, if absent, the person in charge of a ship falling within the ambit of this Act, will commit an offence if he -

(a) fails to produce a valid International Ballast Water Certificate;

(b) produces false or misleading International Ballast Water Certificate, in relation to the ship concerned;

(c) fails to produce a valid Ballast Water Report Book;

(d) produces a false or misleading Ballast Water Report Book;

(e) fails to produce a valid Ballast Water Management Plan;

(f) produces a false or misleading Ballast Water Management Plan;

(g) refuses to produce:

(i) the International Ballast Water Certificate;

(ii) the Ballast Water Report Book;

(iii) the Ballast Water Management Plan

in relation to the ship concerned;

(h) causes to be discharged or taken ballast water within protected designated areas of the Mauritian maritime zone;

(i) otherwise contravenes an environmental law.

(2) The owner of the ship shall commit an offence if he fails to ensure that:

(a) the ship has been issued with a valid International Ballast Water Certificate;

(b) the ship has a Ballast Water Report Book;

(c) the ship has a valid Ballast Water Management Plan;

(3) Any person who commits an offence under any of the above shall-

(a) on first conviction be liable to a fine which shall not be less than 200,000 rupees and not more than 500,000 rupees;

(b) on a second or subsequent conviction, be liable to a fine which shall not be less than 500,000 rupees and not more than 1 million rupees."

89. Actions upon violation being found

(1) If a ship is detected to have violated this Convention, the Administration may in addition to any sanctions prescribed in section 88 or any action described in section 79, take steps to:

(a) warn;

(b) detain; or

(c) exclude;

the ship.

(2) Notwithstanding subsection (1), the Administration may grant such a ship permission to leave the port or offshore terminal for the purpose of discharging ballast water in the designated ballast area, or proceeding to the nearest repair yard or reception facility available, as instructed, providing doing so does not present a threat of harm to the environment, human health, property or resources.

(3) The Administration shall ensure that the ship suspected of having committed an offence under this Act be promptly released upon provision of security which shall be in compliance with the order of the Court seized."

5. Section 94 of the principal Act amended

Section 94 of the principal Act is amended by deleting the words "sections 75 to 78" and replacing them by the words "sections 95 to 98".

6. Section 101 of the principal Act amended

Section 101 of the principal Act is amended by deleting the words "sections 79 or 80" and replacing them by the words "sections 99 or 100".

7. Section 102 of the principal Act amended

Section 102(1) of the principal Act is amended by deleting the words "section 79, 80 or 81" and replacing them by the words "section 99, 100 or 101".

8. Section 103 of the principal Act amended

Section 103 of the principal Act is amended by deleting the words "section 79, 80 or 81" and replacing them by the words "section 99, 100 or 101".

9. Section 112 of the principal Act amended

Section 112(1) of the principal Act is amended by deleting the words "section 96(2)(d)" and replacing them by the words "section 116(2)(d)".

10. New Eighth, Ninth, Tenth and Eleventh Schedules inserted in the Principal Act

The principal Act is amended by inserting after the Seventh Schedule new Eighth, Ninth and Tenth Schedules, the contents of which are in the First, Second and Third Schedules respectively of this Act.

11. Commencement

(1) Subject to subsection (2), this Act shall come into operation on a day to be fixed by Proclamation.

(2) Different dates may be fixed for the coming into operation of different sections of the Act.

FIRST SCHEDULE

ARTICLES OF CONVENTION FOR THE CONTROL AND MANAGEMENT OF SHIPS BALLAST WATER AND SEDIMENTS HAVING THE FORCE OF LAW IN MAURITIUS

Preamble

THE PARTIES TO THIS CONVENTION,

RECALLING Article 196(1) of the 1982 United Nations Convention on the Law of the Sea (UNCLOS), which provides that "States shall take all measures necessary to prevent, reduce and control pollution of the marine environment resulting from the use of technologies under their jurisdiction or control, or the intentional or accidental introduction of species, alien or new, to a particular part of the marine environment, which may cause significant and harmful changes thereto,"

NOTING the objectives of the 1992 Convention on Biological Diversity (CBD) and that the transfer and introduction of Harmful Aquatic Organisms and Pathogens via ships' ballast water threatens the conservation and sustainable use of biological diversity as well as decision IV/5 of the 1998 Conference of the Parties (COP 4) to the CBD concerning the conservation and sustainable use of marine and coastal ecosystems, as well as decision VI/23 of the 2002 Conference of the Parties (COP 6) to the CBD on alien species that threaten ecosystems, habitats or species, including guiding principles on invasive species,

NOTING FURTHER that the 1992 United Nations Conference on Environment and Development (UNCED) requested the International Maritime Organization (the Organization) to consider the adoption of appropriate rules on ballast water discharge,

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 the Organization's Marine Environment Protection Committee on 15 September 1995,

ALSO MINDFUL that the 2002 World Summit on Sustainable Development, in paragraph 34(b) of its Plan of Implementation, calls for action at all levels to accelerate the development of measures to address invasive alien species in ballast water,

CONSCIOUS that the uncontrolled discharge of Ballast Water and Sediments from ships has led to the transfer of Harmful Aquatic Organisms and Pathogens, causing injury or damage to the environment, human health, property and resources,

RECOGNIZING the importance placed on this issue by the Organization through Assembly resolutions A.774(18) in 1993 and A.868(20) in 1997, adopted for the purpose of addressing the transfer of Harmful Aquatic Organisms and Pathogens,

RECOGNIZING FURTHER that several States have taken individual action with a view to prevent, minimize and ultimately eliminate the risks of introduction of Harmful Aquatic Organisms and Pathogens through ships entering their ports, and also that this issue, being of worldwide concern, demands action based on globally applicable regulations together with guidelines for their effective implementation and uniform interpretation,

DESIRING to continue the development of safer and more effective Ballast Water Management options that will result in continued prevention, minimization and ultimate elimination of the transfer of Harmful Aquatic Organisms and Pathogens,

RESOLVED to prevent, minimize and ultimately eliminate the risks to the environment, human health, property and resources arising from the transfer of Harmful Aquatic Organisms and Pathogens through the control and management of ships' Ballast Water and Sediments, as well as to avoid unwanted side-effects from that control and to encourage developments in related knowledge and technology,

CONSIDERING that these objectives may best be achieved by the conclusion of an International Convention for the Control and Management of Ships' Ballast Water and Sediments,

HAVE AGREED as follows:

For the purpose of this Convention, unless expressly provided otherwise:

Article 1:

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 any State, the Administration is the Government of that State. With respect to 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 its natural resources, including Floating Storage Units (FSUs) and Floating Production Storage and Offloading Units (FPSOs), the Administration is the Government of the coastal State concerned.

2. “Ballast Water” means water with its suspended matter taken on board a ship to control trim, list, draught, stability or stresses of the ship.

3. “Ballast Water Management” means mechanical, physical, chemical, and biological processes, either singularly or in combination, to remove, render harmless, or avoid the uptake or discharge of Harmful Aquatic Organisms and Pathogens within Ballast Water and Sediments.

4. “Certificate” means the International Ballast Water Management Certificate.

5. “Committee” means the Marine Environment Protection Committee of the Organization.

6. “Convention” means the International Convention for the Control and Management of Ships’ Ballast Water and Sediments.

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

8. “Harmful Aquatic Organisms and Pathogens” means aquatic organisms or pathogenswhich, if introduced into the sea including estuaries, or into fresh water courses, may create hazards to the environment, human health, property or resources, impair biological diversity or interfere with other legitimate uses of such areas.

9. “Organization” means the International Maritime Organization.

10. “Secretary-General” means the Secretary-General of the Organization.

11. “Sediments” means matter settled out of Ballast Water within a ship.

12. “Ship” means a vessel of any type whatsoever operating in the aquatic environment and includes submersibles, floating craft, floating platforms, FSUs and FPSOs.

Article 2:

1. Parties undertake to give full and complete effect to the provisions of this Convention and the Annex thereto in order to prevent, minimize and ultimately eliminate the transfer of Harmful Aquatic Organisms and Pathogens through the control and management of ships' Ballast Water and Sediments.

2. The Annex forms an integral part of this Convention. Unless expressly provided otherwise, a reference to this Convention constitutes at the same time a reference to the Annex.

3. Nothing in this Convention shall be interpreted as preventing a Party from taking, individually or jointly with other Parties, more stringent measures with respect to the prevention, reduction or elimination of the transfer of Harmful Aquatic Organisms and Pathogens through the control and management of ships' Ballast Water and Sediments, consistent with international law.

4. Parties shall endeavour to co-operate for the purpose of effective implementation, compliance and enforcement of this Convention.

5. Parties undertake to encourage the continued development of Ballast Water Management and standards to prevent, minimize and ultimately eliminate the transfer of Harmful Aquatic Organisms and Pathogens through the control and management of ships' Ballast Water and Sediments.

6. Parties taking action pursuant to this Convention shall endeavour not to impair or damage their environment, human health, property or resources, or those of other States.

7. Parties should ensure that Ballast Water Management practices used to comply with this Convention do not cause greater harm than they prevent to their environment, human health, property or resources, or those of other States.

8. Parties shall encourage ships entitled to fly their flag, and to which this Convention applies, to avoid, as far as practicable, the uptake of Ballast Water with potentially Harmful Aquatic Organisms and Pathogens, as well as Sediments that may contain such organisms, including promoting the adequate implementation of recommendations developed by the Organization.

9. Parties shall endeavour to co-operate under the auspices of the Organization to address threats and risks to sensitive, vulnerable or threatened marine ecosystems and biodiversity in areas beyond the limits of national jurisdiction in relation to Ballast Water Management.

Article 3:

1. Except as expressly provided otherwise in this Convention, this Convention shall apply to:

(a) ships entitled to fly the flag of a Party; and

(b) ships not entitled to fly the flag of a Party but which operate under the authority of a Party.

2. This Convention shall not apply to:

(a) ships not designed or constructed to carry Ballast Water;

(b) ships of a Party which only operate in waters under the jurisdiction of that Party, unless the Party determines that the discharge of Ballast Water from such ships would impair or damage their environment, human health, property or resources, or those of adjacent or other States;

(c) ships of a Party which only operate in waters under the jurisdiction of another Party, subject to the authorization of the latter Party for such exclusion. No Party shall grant such authorization if doing so would impair or damage their environment, human health, property or resources, or those of adjacent or other States. Any Party not granting such authorization shall notify the Administration of the ship concerned that this Convention applies to such ship;

(d) ships which only operate in waters under the jurisdiction of one Party and on the high seas, except for ships not granted an authorization pursuant to sub-paragraph (c), unless such Party determines that the discharge of Ballast Water from such ships would impair or damage their environment, human health, property or resources, or those of adjacent of other States;

(e) any warship, naval auxiliary or other ship owned or operated by a State and used, for the time being, only on government non-commercial service. However, each Party shall ensure, by the adoption of appropriate measures not impairing operations or operational capabilities of such ships owned or operated by it, that such ships act in a manner consistent, so far as is reasonable and practicable, with this Convention; and

(f) permanent Ballast Water in sealed tanks on ships, that is not subject to discharge.

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

Article 4:

1. Each Party shall require that ships to which this Convention applies and which are entitled to fly its flag or operating under its authority comply with the requirements set forth in this Convention, including the applicable standards and requirements in the Annex, and shall take effective measures to ensure that those ships comply with those requirements.

2. Each Party shall, with due regard to its particular conditions and capabilities, develop national policies, strategies or programmes for Ballast Water Management in its ports and waters under its jurisdiction that accord with, and promote the attainment of the objectives of this Convention.

Article 5:

1. Each Party undertakes to ensure that, in ports and terminals designated by that Party where cleaning or repair of ballast tanks occurs, adequate facilities are provided for the reception of Sediments, taking into account the Guidelines developed by the Organization. Such reception facilities shall operate without causing undue delay to ships and shall provide for the safe disposal of such Sediments that does not impair or damage their environment, human health, property or resources or those of other States.

2. Each Party shall notify the Organization for transmission to the other Parties concerned of all cases where the facilities provided under paragraph 1 are alleged to be inadequate.

Article 6:

1. Parties shall endeavour, individually or jointly, to:

(a) promote and facilitate scientific and technical research on Ballast Water Management; and

(b) monitor the effects of Ballast Water Management in waters under their jurisdiction.

Such research and monitoring should include observation, measurement, sampling, evaluation and analysis of the effectiveness and adverse impacts of any technology or methodology as well as any adverse impacts caused by such organisms and pathogens that have been identified to have been transferred through ships' Ballast Water.

2. Each Party shall, to further the objectives of this Convention, promote the availability of relevant information to other Parties who request it on:

(a) scientific and technology programmes and technical measures undertaken with respect to Ballast Water Management; and

(b) the effectiveness of Ballast Water Management deduced from any monitoring and assessment programmes.

Article 7:

1. Each Party shall ensure that ships flying its flag or operating under its authority and subject to survey and certification are so surveyed and certified in accordance with the regulations in the Annex.

2. A Party implementing measures pursuant to Article 2.3 and Section C of the Annex shall not require additional survey and certification of a ship of another Party, nor shall the Administration of the ship be obligated to survey and certify additional measures imposed by another Party. Verification of such additional measures shall be the responsibility of the Party implementing such measures and shall not cause undue delay to the ship.

Article 8:

1. Any violation of the requirements of this Convention shall be prohibited and sanctions shall be established under the law of the Administration of the ship concerned, wherever the violation occurs. If the Administration is informed of such a violation, it shall investigate the matter and may request the reporting Party to furnish additional evidence of the alleged violation. If the 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 its law. The Administration shall promptly inform the Party that reported the alleged violation, as well as the Organization, of any action taken. If the Administration has not taken any action within 1 year after receiving the information, it shall so inform the Party which reported the alleged violation.

2. Any violation of the requirements of this Convention within the jurisdiction of any Party shall be prohibited and sanctions shall be established under the law of that Party. Whenever such a violation occurs, that Party shall either:

(a) cause proceedings to be taken in accordance with its law; or

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

3. The sanctions provided for by the laws of a Party pursuant to this Article shall be adequate in severity to discourage violations of this Convention wherever they occur.

Article 9:

1. A ship to which this Convention applies may, in any port or offshore terminal of another Party, be subject to inspection by officers duly authorized by that Party for the purpose of determining whether the ship is in compliance with this Convention. Except as provided in paragraph 2 of this Article, any such inspection is limited to:

(a) verifying that there is onboard a valid Certificate, which, if valid shall be accepted; and

(b) inspection of the Ballast Water record book, and/or

(c) a sampling of the ship's Ballast Water, carried out in accordance with the guidelines to be developed by the Organization. However, the time required to analyse the samples shall not be used as a basis for unduly delaying the operation, movement or departure of the ship.

2. Where a ship does not carry a valid Certificate or there are clear grounds for believing that:

(a) the condition of the ship or its equipment does not correspond substantially with the particulars of the Certificate; or

(b) the master or the crew are not familiar with essential shipboard procedures relating to Ballast Water Management, or have not implemented such procedures;

a detailed inspection may be carried out.

3. In the circumstances given in paragraph 2 of this Article, the Party carrying out the inspection shall take such steps as will ensure that the ship shall not discharge Ballast Water until it can do so without presenting a threat of harm to the environment, human health, property or resources.

Article 10:

1. Parties shall co-operate in the detection of violations and the enforcement of the provisions of this Convention.

2. If a ship is detected to have violated this Convention, the Party whose flag the ship is entitled to fly, and/or the Party in whose port or offshore terminal the ship is operating, may, in addition to any sanctions described in Article 8 or any action described in Article 9, take steps to warn, detain, or exclude the ship. The Party in whose port or offshore terminal the ship is operating, however, may grant such a ship permission to leave the port or offshore terminal for the purpose of discharging Ballast Water or proceeding to the nearest appropriate repair yard or reception facility available, provided doing so does not present a threat of harm to the environment, human health, property or resources.

3. If the sampling described in Article 9.1(c) leads to a result, or supports information received from another port or offshore terminal, indicating that the ship poses a threat to the environment, human health, property or resources, the Party in whose waters the ship is operating shall prohibit such ship from discharging Ballast Water until the threat is removed.

4. A Party may also inspect a ship when it enters the ports or offshore terminals under its jurisdiction, 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 a provision in this 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 appropriate action may be taken.

Article 11:

1. If an inspection conducted pursuant to Article 9 or 10 indicates a violation of this Convention, the ship shall be notified. A report shall be forwarded to the Administration, including any evidence of the violation.

2. In the event that any action is taken pursuant to Article 9.3, 10.2 or 10.3, the officer carrying out such action shall forthwith inform, in writing, the

Administration of the ship concerned, or if this is not possible, the consul or diplomatic representative of the ship concerned, of all the circumstances in which the action was deemed necessary. In addition, the recognized organization responsible for the issue of certificates shall be notified.

3. The port State authority concerned shall, in addition to parties mentioned in paragraph 2, notify the next port of call of all relevant information about the violation, if it is unable to take action as specified in Article 9.3, 10.2 or 10.3 or if the ship has been allowed to proceed to the next port of call.

Article 12:

1. All possible efforts shall be made to avoid a ship being unduly detained or delayed under Article 7.2, 8, 9 or 10.

2. When a ship is unduly detained or delayed under Article 7.2, 8, 9 or 10, it shall be entitled to compensation for any loss or damage suffered.

Article 13:

1. Parties undertake, directly or through the Organization and other international bodies, as appropriate, in respect of the control and management of ships' Ballast Water and Sediments, to provide support for those Parties which request technical assistance:

(a) to train personnel;

(b) to ensure the availability of relevant technology, equipment and facilities;

(c) to initiate joint research and development programmes; and

(d) to undertake other action aimed at the effective implementation of this Convention and of guidance developed by the Organization related thereto.

2. Parties undertake to co-operate actively, subject to their national laws, regulations and policies, in the transfer of technology in respect of the control and management of ships' Ballast Water and Sediments.

3. In order to further the objectives of this Convention, Parties with common interests to protect the environment, human health, property and resources in a given geographical area, in particular, those Parties bordering enclosed and semi-enclosed seas, shall endeavour, taking into account characteristic regional features, to enhance regional co-operation, including through the conclusion of regional agreements consistent with this

Convention. Parties shall seek to co-operate with the Parties to regional agreements to develop harmonized procedures.

Article 14:

1. Each Party shall report to the Organization and, where appropriate, make available to other Parties the following information:

(a) any requirements and procedures relating to Ballast Water Management, including its laws, regulations, and guidelines for implementation of this Convention;

(b) the availability and location of any reception facilities for the environmentally safe disposal of Ballast Water and Sediments; and

(c) any requirements for information from a ship which is unable to comply with the provisions of this Convention for reasons specified in regulations A-3 and B-4 of the Annex.

2. The Organization shall notify Parties of the receipt of any communications under the present Article and circulate to all Parties any information communicated to it under subparagraphs 1(b) and (c) of this Article.

Article 15:
Parties shall settle any dispute between them concerning the interpretation or application of this Convention by negotiation, enquiry, mediation, conciliation, arbitration, judicial settlement, resort to regional agencies or arrangements or other peaceful means of their own choice.

Article 16:
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.

Article 17:

1. This Convention shall be open for signature by any State at the Headquarters of the Organization from 1 June 2004 to 31 May 2005 and shall thereafter remain open for accession by any State.

2. States may become Parties to the Convention by:

(a) signature not subject to ratification, acceptance, or approval; or

(b) signature subject to ratification, acceptance, or approval, followed by ratification, acceptance or approval; or

(c) accession.

3. Ratification, acceptance, approval or accession shall be effected by the deposit of an instrument to that effect with the Secretary-General.

4. If a State comprises two or more territorial units in which different systems of law are applicable in relation to matters dealt with in this Convention, it may at the time of signature, ratification, acceptance, approval, or accession declare that this Convention shall extend to all its territorial units or only to one or more of them and may modify this declaration by submitting another declaration at any time.

5. Any such declaration shall be notified to the Depositary in writing and shall state expressly the territorial unit or units to which this Convention applies.

Article 18:

1. This Convention shall enter into force twelve months after the date on which not less than thirty States, the combined merchant fleets of which constitute not less than thirty-five percent of the gross tonnage of the world's merchant shipping, have either signed it without reservation as to ratification, acceptance or approval, or have deposited the requisite instrument of ratification, acceptance, approval or accession in accordance with Article 17.

2. For States which have deposited an instrument of ratification, acceptance, approval or accession in respect of this Convention after the requirements for entry into force thereof have been met, but prior to the date of entry in force, the ratification, acceptance, approval or accession shall take effect on the date of entry into force of this Convention or three months after the date of deposit of instrument, whichever is the later date.

3. 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.

4. After the date on which an amendment to this Convention is deemed to have been accepted under Article 19, any instrument of ratification, acceptance, approval or accession deposited shall apply to this Convention as amended.

Article 19:

1. This Convention may be amended by either of the procedures specified in the following paragraphs.

2. Amendments after consideration within the Organization:

(a) Any Party may propose an amendment to this Convention. A proposed amendment shall be submitted to the Secretary-General, who shall then circulate it to the Parties and Members of the Organization at least six months prior to its consideration.

(b) An amendment proposed and circulated as above shall be referred to the Committee for consideration. Parties, whether or not Members of the Organization, shall be entitled to participate in the proceedings of the Committee for consideration and adoption of the amendment.

(c) Amendments shall be adopted by a two-thirds majority of the Parties present and voting in the Committee, on condition that at least one-third of the Parties shall be present at the time of voting.

(d) Amendments adopted in accordance with subparagraph (c) shall be communicated by the Secretary-General to the Parties for acceptance.

(e) An amendment shall be deemed to have been accepted in the following circumstances:

(i) An amendment to an article of this Convention shall be deemed to have been accepted on the date on which two-thirds of the Parties have notified the Secretary-General of their acceptance of it.

(ii) An amendment to the Annex shall be deemed to have been accepted at the end of twelve months after the date of adoption or such other date as determined by the Committee. However, if by that date more than one-third of the Parties notify the Secretary-General that they object to the amendment, it shall be deemed not to have been accepted.

(f) An amendment shall enter into force under the following conditions:

(i) An amendment to an article of this Convention shall enter into force for those Parties that have declared that they have accepted it six months after the date on which it is deemed to have been accepted in accordance with subparagraph (e)(i).

(ii) An amendment to the Annex shall enter into force with respect to all Parties six months after the date on which it is deemed to have been accepted, except for any Party that has:

(1) notified its objection to the amendment in accordance with subparagraph (e)(ii) and that has not withdrawn such objection; or

(2) notified the Secretary-General, prior to the entry into force of such amendment, that the amendment shall enter into force for it only after a subsequent notification of its acceptance.

(g)

(i) A Party that has notified an objection under subparagraph (f)(ii)(1) may subsequently notify the Secretary-General that it accepts the amendment. Such amendment shall enter into force for such Party six months after the date of its notification of acceptance, or the date on which the amendment enters into force, whichever is the later date.

(ii) If a Party that has made a notification referred to in subparagraph (f)(ii)(2) notifies the Secretary-General of its acceptance with respect to an amendment, such amendment shall enter into force for such Party six months after the date of its notification of acceptance, or the date on which the amendment enters into force, whichever is the later date.

3. Amendment by a Conference:

(a) Upon the request of a Party concurred in by at least one-third of the Parties, the Organization shall convene a Conference of Parties to consider amendments to this Convention.

(b) An amendment adopted by such a Conference by a two-thirds majority of the Parties present and voting shall be communicated by the Secretary-General to all Parties for acceptance.

(c) Unless the Conference decides otherwise, the amendment shall be deemed to have been accepted and shall enter into force in accordance with the procedures specified in paragraphs 2(e) and (f) respectively.

4. Any Party that has declined to accept an amendment to the Annex shall be treated as a non-Party only for the purpose of application of that amendment.

5. Any notification under this Article shall be made in writing to the Secretary-General.

6. The Secretary-General shall inform the Parties and Members of the Organization of:

(a) any amendment that enters into force and the date of its entry into force generally and for each Party; and

(b) any notification made under this Article.

Article 20

1. This Convention may be denounced by any Party at any time after the expiry of two years from the date on which this Convention enters into force for that Party.

2. Denunciation shall be effected by written notification to the Depositary, to take effect one year after receipt or such longer period as may be specified in that notification.

Article 21:

1. This Convention shall be deposited with the Secretary-General, who shall transmit certified copies of this Convention to all States which have signed this Convention or acceded thereto.

2. In addition to the functions specified elsewhere in this Convention, the Secretary-General shall:

(a) inform all States that have signed this Convention, or acceded thereto, of:

(i) each new signature or deposit of an instrument of ratification, acceptance, approval or accession, together with the date thereof;

(ii) the date of entry into force of this Convention; and

(iii) the deposit of any instrument of denunciation from the Convention, together with the date on which it was received and the date on which the denunciation takes effect; and

(b) as soon as this Convention enters into force, transmit the text thereof to the Secretariat of the United Nations for registration and publication in accordance with Article 102 of the Charter of the United Nations.

Article 22:

This Convention is established in a single original in the Arabic, Chinese, English, French, Russian and Spanish languages, each text being equally authentic.

DONE AT LONDON this thirteenth day of February, two thousand and four.

IN WITNESS WHEREOF the undersigned, being duly authorised by their respective Governments for that purpose, have signed this Convention.

SECTION A - GENERAL PROVISIONS

Regulation A-1 Definitions*For the purposes of this Annex:*

1. “Anniversary date” means the day and the month of each year corresponding to the date of expiry of the Certificate.

2. “Ballast Water Capacity” means the total volumetric capacity of any tanks, spaces or compartments on a ship used for carrying, loading or discharging Ballast Water, including any multi-use tank, space or compartment designed to allow carriage of Ballast Water.

3. “Company” means the owner of the ship or any other organization or person such as the manager, or the bareboat charterer, who has assumed the responsibility for operation of the ship from the owner of the ship and who on assuming such responsibility has agreed to take over all the duties and responsibilities imposed by the International Safety Management Code [1].

4. “Constructed” in respect of a ship means a stage of construction where:

1) the keel is laid; or

2) construction identifiable with the specific ship begins;

3) assembly of the ship has commenced comprising at least 50 tonnes or 1 percent of the estimated mass of all structural material, whichever is less; or

4) the ship undergoes a major conversion.

5. “Major conversion” means a conversion of a ship:

1) which changes its ballast water carrying capacity by 15 percent or greater, or

2) which changes the ship type, or

3) which, in the opinion of the Administration, is projected to prolong its life by ten years or more, or

4) which results in modifications to its ballast water system other than component replacement-in-kind. Conversion of a ship to meet the provisions of regulation D-1 shall not be deemed to constitute a major conversion for the purpose of this Annex.

6. “From the nearest land” means from the baseline from which the territorial sea of the territory in question is established in accordance with international law except that, for the purposes of the Convention, “from the nearest land” off the north-eastern coast of Australia shall mean from a line drawn from a point on the coast of Australia in

latitude 11°00′ S, longitude 142°08′ E

to a point in latitude 10°35′ S, longitude 141°55′ E

thence to a point latitude 10°00′ S, longitude 142°00′ E

thence to a point latitude 9°10′ S, longitude 143°52′ E

thence to a point latitude 9°00′ S, longitude 144°30′ E

thence to a point latitude 10°41′ S, longitude 145°00′ E

thence to a point latitude 13°00′ S, longitude 145°00′ E

thence to a point latitude 15°00′ S, longitude 146°00′ E

thence to a point latitude 17°30′ S, longitude 147°00′ E

thence to a point latitude 21°00′ S, longitude 152°55′ E

thence to a point latitude 24°30′ S, longitude 154°00′ E

thence to a point on the coast of Australia

in latitude 24°42′ S, longitude 153°15′ E.

7. "Active Substance" means a substance or organism, including a virus or a fungus, that has a general or specific action on or against Harmful Aquatic Organisms and Pathogens.

Regulation A-2 General Applicability

Except where expressly provided otherwise, the discharge of Ballast Water shall only be conducted through Ballast Water Management in accordance with the provisions of this Annex.

Regulation A-3 Exceptions

The requirements of regulation B-3, or any measures adopted by a Party pursuant to Article 2.3 and Section C, shall not apply to:

1. the uptake or discharge of Ballast Water and Sediments necessary for the purpose of ensuring the safety of a ship in emergency situations or saving life at sea; or

2. the accidental discharge or ingress of Ballast Water and Sediments resulting from damage to a ship or its equipment:

1) provided that all reasonable precautions have been taken before and after the occurrence of the damage or discovery of the damage or discharge for the purpose of preventing or minimizing the discharge; and

2) unless the owner, Company or officer in charge wilfully or recklessly caused damage; or

3. the uptake and discharge of Ballast Water and Sediments when being used for the purpose of avoiding or minimizing pollution incidents from the ship; or

4. the uptake and subsequent discharge on the high seas of the same Ballast Water and Sediments; or

5. the discharge of Ballast Water and Sediments from a ship at the same location where the whole of that Ballast Water and those Sediments originated and provided that no mixing with unmanaged Ballast Water and Sediments from other areas has occurred. If mixing has occurred, the Ballast Water taken from other areas is subject to Ballast Water Management in accordance with this Annex.

Regulation A-4 Exemptions

1. A Party or Parties, in waters under their jurisdiction, may grant exemptions to any requirements to apply regulations B-3 or C-1, in addition to those exemptions contained elsewhere in this Convention, but only when they are:

1) granted to a ship or ships on a voyage or voyages between specified ports or locations; or to a ship which operates exclusively between specified ports or locations;

2) effective for a period of no more than five years subject to intermediate review;

3) granted to ships that do not mix Ballast Water or Sediments other than between the ports or locations specified in paragraph 1.1; and

4) granted based on the Guidelines on risk assessment developed by the Organization.

2. Exemptions granted pursuant to paragraph 1 shall not be effective until after communication to the Organization and circulation of relevant information to the Parties.

3. Any exemptions granted under this regulation shall not impair or damage the environment, human health, property or resources of adjacent or other States. Any State that the Party determines may be adversely affected shall be consulted, with a view to resolving any identified concerns.

4. Any exemptions granted under this regulation shall be recorded in the Ballast Water record book.

Regulation A-5 Equivalent compliance

Equivalent compliance with this Annex for pleasure craft used solely for recreation or competition or craft used primarily for search and rescue, less than 50 metres in length overall, and with a maximum Ballast Water capacity of 8 cubic metres, shall be determined by the Administration taking into account Guidelines developed by the Organization.

SECTION B – MANAGEMENT AND CONTROL REQUIREMENTS FOR SHIPS

Regulation B-1 Ballast Water Management Plan

Each ship shall have on board and implement a Ballast Water Management plan. Such a plan shall be approved by the Administration taking into account Guidelines developed by the Organization. The Ballast Water Management plan shall be specific to each ship and shall at least:

1. detail safety procedures for the ship and the crew associated with Ballast Water Management as required by this Convention;

2. provide a detailed description of the actions to be taken to implement the Ballast Water Management requirements and supplemental Ballast Water Management practices as set forth in this Convention;

3. detail the procedures for the disposal of Sediments:

1) at sea; and

2) to shore;

4. include the procedures for coordinating shipboard Ballast Water Management that involves discharge to the sea with the authorities of the State into whose waters such discharge will take place;

5. designate the officer on board in charge of ensuring that the plan is properly implemented;

6. contain the reporting requirements for ships provided for under this Convention; and

7. be written in the working language of the ship. If the language used is not English, French or Spanish, a translation into one of these languages shall be included.

Regulation B-2 Ballast Water Record Book

1. Each ship shall have on board a Ballast Water record book that may be an electronic record system, or that may be integrated into another record book or system and, which shall at least contain the information specified in Appendix II.

2. Ballast Water record book entries shall be maintained on board the ship for a minimum period of two years after the last entry has been made and thereafter in the Company's control for a minimum period of three years.

3. In the event of the discharge of Ballast Water pursuant to regulations A-3, A-4 or B-3.6 or in the event of other accidental or exceptional discharge of Ballast Water not otherwise exempted by this Convention, an entry shall be made in the Ballast Water record book describing the circumstances of, and the reason for, the discharge.

4. The Ballast Water record book shall be kept readily available for inspection at all reasonable times and, in the case of an unmanned ship under tow, may be kept on the towing ship.

5. Each operation concerning Ballast Water shall be fully recorded without delay in the Ballast Water record book. Each entry shall be signed by the officer in charge of the operation concerned and each completed page shall be signed by the master. The entries in the Ballast Water record book shall be in a working language of the ship. If that language is not English, French or Spanish the entries shall contain a translation into one of those languages. When entries in an official national language of the State whose flag the ship is entitled to fly are also used, these shall prevail in case of a dispute or discrepancy.

6. Officers duly authorized by a Party may inspect the Ballast Water record book on board any ship to which this regulation applies while the ship is in its port or offshore terminal, and may make a copy of any entry, and require the master to certify that the copy is a true copy. Any copy so certified shall be admissible in

any judicial proceeding as evidence of the facts stated in the entry. The inspection of a Ballast Water record book and the taking of a certified copy shall be performed as expeditiously as possible without causing the ship to be unduly delayed.

Regulation B-3 Ballast Water Management for Ships

1. A ship constructed before 2009:

1) with a Ballast Water Capacity of between 1,500 and 5,000 cubic metres, inclusive, shall conduct Ballast Water Management that at least meets the standard described in regulation D-1 or regulation D-2 until 2014, after which time it shall at least meet the standard described in regulation D-2;

2) with a Ballast Water Capacity of less than 1,500 or greater than 5,000 cubic metres shall conduct Ballast Water Management that at least meets the standard described in regulation D-1 or regulation D-2 until 2016, after which time it shall at least meet the standard described in regulation D-2.

2. A ship to which paragraph 1 applies shall comply with paragraph 1 not later than the first intermediate or renewal survey, whichever occurs first, after the anniversary date of delivery of the ship in the year of compliance with the standard applicable to the ship.

3. A ship constructed in or after 2009 with a Ballast Water Capacity of less than 5,000 cubic metres shall conduct Ballast Water Management that at least meets the standard described in regulation D-2.

4. A ship constructed in or after 2009, but before 2012, with a Ballast Water Capacity of 5,000 cubic metres or more shall conduct Ballast Water Management in accordance with paragraph 1.2.

5. A ship constructed in or after 2012 with a Ballast Water Capacity of 5000 cubic metres or more shall conduct Ballast Water Management that at least meets the standard described in regulation D-2.

6. The requirements of this regulation do not apply to ships that discharge Ballast Water to a reception facility designed taking into account the Guidelines developed by the Organization for such facilities.

7. Other methods of Ballast Water Management may also be accepted as alternatives to the requirements described in paragraphs 1 to 5, provided that such

methods ensure at least the same level of protection to the environment, human health, property or resources, and are approved in principle by the Committee.

Regulation B-4 Ballast Water Exchange

1. A ship conducting Ballast Water exchange to meet the standard in regulation D-1 shall:

1) whenever possible, conduct such Ballast Water exchange at least 200 nautical miles from the nearest land and in water at least 200 metres in depth, taking into account the Guidelines developed by the Organization;

2) in cases where the ship is unable to conduct Ballast Water exchange in accordance with paragraph 1.1, such Ballast Water exchange shall be conducted taking into account the Guidelines described in paragraph 1.1 and as far from the nearest land as possible, and in all cases at least 50 nautical miles from the nearest land and in water at least 200 metres in depth.

2. In sea areas where the distance from the nearest land or the depth does not meet the parameters described in paragraph 1.1 or 1.2, the port State may designate areas, in consultation with adjacent or other States, as appropriate, where a ship may conduct Ballast Water exchange, taking into account the Guidelines described in paragraph 1.1.

3. A ship shall not be required to deviate from its intended voyage, or delay the voyage, in order to comply with any particular requirement of paragraph 1.

4. A ship conducting Ballast Water exchange shall not be required to comply with paragraphs 1 or 2, as appropriate, if the master reasonably decides that such exchange would threaten the safety or stability of the ship, its crew, or its passengers because of adverse weather, ship design or stress, equipment failure, or any other extraordinary condition.

5. When a ship is required to conduct Ballast Water exchange and does not do so in accordance with this regulation, the reasons shall be entered in the Ballast Water record book.

Regulation B-5 Sediment Management for Ships

1. All ships shall remove and dispose of Sediments from spaces designated to carry Ballast Water in accordance with the provisions of the ship's Ballast Water Management plan.

2. Ships described in regulation B-3.3 to B-3.5 should, without compromising safety or operational efficiency, be designed and constructed with a view to minimize the uptake and undesirable entrapment of Sediments, facilitate removal of Sediments, and provide safe access to allow for Sediment removal and sampling, taking into account guidelines developed by the Organization. Ships described in regulation B-3.1 should, to the extent practicable, comply with this paragraph.

Regulation B-6 Duties of Officers and Crew

Officers and crew shall be familiar with their duties in the implementation of Ballast Water Management particular to the ship on which they serve and shall, appropriate to their duties, be familiar with the ship's Ballast Water Management plan.

SECTION C – SPECIAL REQUIREMENTS IN CERTAIN AREAS

Regulation C-1 Additional Measures

1. If a Party, individually or jointly with other Parties, determines that measures in addition to those in Section B are necessary to prevent, reduce, or eliminate the transfer of Harmful Aquatic Organisms and Pathogens through ships' Ballast Water and Sediments, such Party or Parties may, consistent with international law, require ships to meet a specified standard or requirement.

2**.** Prior to establishing standards or requirements under paragraph 1, a Party or Parties should consult with adjacent or other States that may be affected by such standards or requirements.

3. A Party or Parties intending to introduce additional measures in accordance with paragraph1 shall:

1) take into account the Guidelines developed by the Organization.

2) communicate their intention to establish additional measure(s) to the Organization at least 6 months, except in emergency or epidemic situations, prior to the projected date of implementation of the measure(s). Such communication shall include:

1)) the precise co-ordinates where additional measure(s) is/are applicable;

2)) the need and reasoning for the application of the additional measure(s), including, whenever possible, benefits;

3)) a description of the additional measure(s); and

4)) any arrangements that may be provided to facilitate ships' compliance with the additional measure(s).

3) to the extent required by customary international law as reflected in the United Nations Convention on the Law of the Sea, as appropriate, obtain the approval of the Organization.

4. A Party or Parties, in introducing such additional measures, shall endeavour to make available all appropriate services, which may include but are not limited to notification to mariners of areas, available and alternative routes or ports, as far as practicable, in order to ease the burden on the ship.

5. Any additional measures adopted by a Party or Parties shall not compromise the safety and security of the ship and in any circumstances not conflict with any other convention with which the ship must comply.

6. A Party or Parties introducing additional measures may waive these measures for a period of time or in specific circumstances as they deem fit.

Regulation C-2 Warnings Concerning Ballast Water Uptake in Certain Areas and Related Flag State Measures

1. A Party shall endeavour to notify mariners of areas under their jurisdiction where ships should not uptake Ballast Water due to known conditions. The Party shall include in such notices the precise coordinates of the area or areas, and, where possible, the location of any alternative area or areas for the uptake of Ballast Water. Warnings may be issued for areas:

1) known to contain outbreaks, infestations, or populations of Harmful Aquatic Organisms and Pathogens (e.g., toxic algal blooms) which are likely to be of relevance to Ballast Water uptake or discharge;

2) near sewage outfalls; or

3) where tidal flushing is poor or times during which a tidal stream is known to be more turbid.

2. In addition to notifying mariners of areas in accordance with the provisions of paragraph1, a Party shall notify the Organization and any potentially affected coastal States of any areas identified in paragraph1 and the time period such warning is likely to be in effect. The notice to the Organization and any potentially affected coastal States shall include the precise coordinates of the area or areas, and, where possible, the location of any alternative area or areas for the uptake of Ballast Water. The notice shall include advice to ships needing to uptake Ballast Water in the area, describing arrangements made for alternative supplies. The Party shall also notify mariners, the Organization, and any potentially affected coastal States when a given warning is no longer applicable.

Regulation C-3 Communication of Information

The Organization shall make available, through any appropriate means, information communicated to it under regulations C-1 and C-2.

SECTION D - STANDARDS FOR BALLAST WATER MANAGEMENT

Regulation D-1 Ballast Water Exchange Standard

1. Ships performing Ballast Water exchange in accordance with this regulation shall do so with an efficiency of at least 95 percent volumetric exchange of Ballast Water.

2. For ships exchanging Ballast Water by the pumping-through method, pumping through three times the volume of each Ballast Water tank shall be considered to meet the standard described in paragraph1. Pumping through less than three times the volume may be accepted provided the ship can demonstrate that at least 95percent volumetric exchange is met.

Regulation D-2 Ballast Water Performance Standard

1. Ships conducting Ballast Water Management in accordance with this regulation shall discharge less than 10 viable organisms per cubic metre greater than or equal to 50micrometres in minimum dimension and less than 10 viable organisms per millilitre less than 50 micrometres in minimum dimension and greater than or equal to 10micrometres in minimum dimension; and discharge of the indicator microbes shall not exceed the specified concentrations described in paragraph 2.

2. Indicator microbes, as a human health standard, shall include:

1) Toxicogenic *Vibrio cholerae* (O1 and O139) with less than 1 colony forming unit (cfu) per 100 millilitres or less than 1 cfu per 1 gram (wet weight) zooplankton samples ;

2) *Escherichia coli* less than 250 cfu per 100 millilitres;

3) Intestinal Enterococci less than100cfu per 100 milliliters.

Regulation D-3 Approval requirements for Ballast Water Management systems

1. Except as specified in paragraph 2, Ballast Water Management systems used to comply with this Convention must be approved by the Administration taking into account Guidelines developed by the Organization.

2. Ballast Water Management systems which make use of Active Substances or preparations containing one or more Active Substances to comply with this Convention shall be approved by the Organization, based on a procedure developed by the Organization. This procedure shall describe the approval and withdrawal of approval of Active Substances and their proposed manner of application. At withdrawal of approval, the use of the relevant Active Substance or Substances shall be prohibited within 1 year after the date of such withdrawal.

3. Ballast Water Management systems used to comply with this Convention must be safe in terms of the ship, its equipment and the crew.

Regulation D-4 Prototype Ballast Water Treatment Technologies

1. For any ship that, prior to the date that the standard in regulation D-2 would otherwise become effective for it, participates in a programme approved by the Administration to test and evaluate promising Ballast Water treatment technologies, the standard in regulation D-2 shall not apply to that ship until five years from the date on which the ship would otherwise be required to comply with such standard.

2. For any ship that, after the date on which the standard in regulation D-2 has become effective for it, participates in a programme approved by the Administration, taking into account Guidelines developed by the Organization, to test and evaluate promising Ballast Water technologies with the potential to result in treatment technologies achieving a standard higher than that in regulation D-2, the standard in regulation D-2 shall cease to apply to that ship for five years from the date of installation of such technology.

3. In establishing and carrying out any programme to test and evaluate promising Ballast Water technologies, Parties shall:

1) take into account Guidelines developed by the Organization, and

2) allow participation only by the minimum number of ships necessary to effectively test such technologies.

4. Throughout the test and evaluation period, the treatment system must be operated consistently and as designed.

Regulation D-5 Review of Standards by the Organization

1. At a meeting of the Committee held no later than three years before the earliest effective date of the standard set forth in regulation D-2, the Committee shall undertake a review which includes a determination of whether appropriate technologies are available to achieve the standard, an assessment of the criteria in paragraph 2, and an assessment of the socio-economic effect(s) specifically in relation to the developmental needs of developing countries, particularly small island developing States. The Committee shall also undertake periodic reviews, as appropriate, to examine the applicable requirements for ships described in regulation B-3.1 as well as any other aspect of Ballast Water Management addressed in this Annex, including any Guidelines developed by the Organization.

2. Such reviews of appropriate technologies shall also take into account:

1) safety considerations relating to the ship and the crew;

2) environmental acceptability, i.e., not causing more or greater environmental impacts than they solve;

3) practicability, i.e., compatibility with ship design and operations;

4) cost effectiveness, i.e., economics; and

5) biological effectiveness in terms of removing, or otherwise rendering not viable, Harmful Aquatic Organisms and Pathogens in Ballast Water.

3. The Committee may form a group or groups to conduct the review(s) described in paragraph 1. The Committee shall determine the composition, terms of reference and specific issues to be addressed by any such group formed. Such groups may develop and recommend proposals for amendment of this Annex for

consideration by the Parties. Only Parties may participate in the formulation of recommendations and amendment decisions taken by the Committee.

4. If, based on the reviews described in this regulation, the Parties decide to adopt amendments to this Annex, such amendments shall be adopted and enter into force in accordance with the procedures contained in Article 19 of this Convention.

SECTION E - SURVEY AND CERTIFICATION REQUIREMENTS FOR BALLAST WATER MANAGEMENT

Regulation E-1 Surveys

1. Ships of 400 gross tonnage and above to which this Convention applies, excluding floating platforms, FSUs and FPSOs, shall be subject to surveys specified below:

1) An initial survey before the ship is put in service or before the Certificate required under regulation E-2 or E-3 is issued for the first time. This survey shall verify that the Ballast Water Management plan required by regulation B-1 and any associated structure, equipment, systems, fitting, arrangements and material or processes comply fully with the requirements of this Convention.

2) A renewal survey at intervals specified by the Administration, but not exceeding five years, except where regulation E-5.2, E-5.5, E-5.6, or E-5.7 is applicable. This survey shall verify that the Ballast Water Management plan required by regulation B-1 and any associated structure, equipment, systems, fitting, arrangements and material or processes comply fully with the applicable requirements of this Convention.

3) An intermediate survey within three months before or after the second Anniversary date or within three months before or after the third Anniversary date of the Certificate, which shall take the place of one of the annual surveys specified in paragraph 1.4. The intermediate surveys shall ensure that the equipment, associated systems and processes for Ballast Water Management fully comply with the applicable requirements of this Annex and are in good working order. Such intermediate surveys shall be endorsed on the Certificate issued under regulation E-2 or E-3.

4) An annual survey within three months before or after each Anniversary date, including a general inspection of the structure, any equipment, systems, fittings, arrangements and material or processes associated with

the Ballast Water Management plan required by regulation B-1 to ensure that they have been maintained in accordance with paragraph 9 and remain satisfactory for the service for which the ship is intended. Such annual surveys shall be endorsed on the Certificate issued under regulation E-2 or E-3.

5) An additional survey either general or partial, according to the circumstances, shall be made after a change, replacement, or significant repair of the structure, equipment, systems, fittings, arrangements and material necessary to achieve full compliance with this Convention. The survey shall be such as to ensure that any such change, replacement, or significant repair has been effectively made, so that the ship complies with the requirements of this Convention. Such surveys shall be endorsed on the Certificate issued under regulation E-2 or E-3.

2. The Administration shall establish appropriate measures for ships that are not subject to the provisions of paragraph 1 in order to ensure that the applicable provisions of this Convention are complied with.

3. Surveys of ships for the purpose of enforcement of the provisions of this Convention shall be carried out by officers of the Administration. The Administration may, however, entrust the surveys either to surveyors nominated for the purpose or to organizations recognized by it.

4. An Administration nominating surveyors or recognizing organizations to conduct surveys, as described in paragraph 3 shall, as a minimum, empower such nominated surveyors or recognized organizations [2] to:

1) require a ship that they survey to comply with the provisions of this Convention; and

2) carry out surveys and inspections if requested by the appropriate authorities of a port State that is a Party.

5. The Administration shall notify the Organization of the specific responsibilities and conditions of the authority delegated to the nominated surveyors or recognized organizations, for circulation to Parties for the information of their officers.

6. When the Administration, a nominated surveyor, or a recognized organization determines that the ship's Ballast Water Management does not conform to the particulars of the Certificate required under regulation E-2 or E-3 or is such that the ship is not fit to proceed to sea without presenting a threat of harm to the

environment, human health, property or resources such surveyor or organization shall immediately ensure that corrective action is taken to bring the ship into compliance. A surveyor or organization shall be notified immediately, and it shall ensure that the Certificate is not issued or is withdrawn as appropriate. If the ship is in the port of another Party, the appropriate authorities of the port State shall be notified immediately. When an officer of the Administration, a nominated surveyor, or a recognized organization has notified the appropriate authorities of the port State, the Government of the port State concerned shall give such officer, surveyor or organization any necessary assistance to carry out their obligations under this regulation, including any action described in Article 9.

7. Whenever an accident occurs to a ship or a defect is discovered which substantially affects the ability of the ship to conduct Ballast Water Management in accordance with this Convention, the owner**,** operator or other person in charge of the ship shall report at the earliest opportunity to the Administration, the recognized organization or the nominated surveyor responsible for issuing the relevant Certificate, who shall cause investigations to be initiated to determine whether a survey as required by paragraph 1 is necessary. If the ship is in a port of another Party, the owner**,** operator or other person in charge shall also report immediately to the appropriate authorities of the port State and the nominated surveyor or recognized organization shall ascertain that such report has been made.

8. In every case, the Administration concerned shall fully guarantee the completeness and efficiency of the survey and shall undertake to ensure the necessary arrangements to satisfy this obligation.

9. The condition of the ship and its equipment, systems and processes shall be maintained to conform with the provisions of this Convention to ensure that the ship in all respects will remain fit to proceed to sea without presenting a threat of harm to the environment, human health, property or resources.

10. After any survey of the ship under paragraph 1 has been completed, no change shall be made in the structure, any equipment, fittings, arrangements or material associated with the Ballast Water Management plan required by regulation B-1 and covered by the survey without the sanction of the Administration, except the direct replacement of such equipment or fittings.

Regulation E-2 Issuance or Endorsement of a Certificate

1. The Administration shall ensure that a ship to which regulation E-1 applies is issued a Certificate after successful completion of a survey conducted in

accordance with regulation E-1. A Certificate issued under the authority of a Party shall be accepted by the other Parties and regarded for all purposes covered by this Convention as having the same validity as a Certificate issued by them.

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

Regulation E-3 Issuance or Endorsement of a Certificate by Another Party

1. At the request of the Administration, another Party may cause a ship to be surveyed and, if satisfied that the provisions of this Convention are complied with, shall issue or authorize the issuance of a Certificate to the ship, and where appropriate, endorse or authorize the endorsement of that Certificate on the ship, in accordance with this Annex.

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 to the effect that it has been issued at the request of the Administration 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 entitled to fly the flag of a State which is not a Party.

Regulation E-4 Form of the Certificate

The Certificate shall be drawn up in the official language of the issuing Party, in the form set forth in Appendix I. If the language used is neither English, French nor Spanish, the text shall include a translation into one of these languages.

Regulation E-5 Duration and Validity of the Certificate

1. A Certificate shall be issued for a period specified by the Administration that shall not exceed five years.

2. For renewal surveys:

1) Notwithstanding the requirements of paragraph 1, when the renewal survey is completed within three months before the expiry date of the existing Certificate, the new Certificate shall be valid from the date of

completion of the renewal survey to a date not exceeding five years from the date of expiry of the existing Certificate.

2) When the renewal survey is completed after the expiry date of the existing Certificate, the new Certificate shall be valid from the date of completion of the renewal survey to a date not exceeding five years from the date of expiry of the existing Certificate.

3) When the renewal survey is completed more than three months before the expiry date of the existing Certificate, the new Certificate shall be valid from the date of completion of the renewal survey to a date not exceeding five years from the date of completion of the renewal survey.

3. If a Certificate is issued for a period of less than five years, the Administration may extend the validity of the Certificate beyond the expiry date to the maximum period specified in paragraph 1, provided that the surveys referred to in regulation E-1.1.3 applicable when a Certificate is issued for a period of five years are carried out as appropriate.

4. If a renewal survey has been completed and a new Certificate cannot be issued or placed on board the ship before the expiry date of the existing Certificate, the person or organization authorized by the Administration may endorse the existing Certificate and such a Certificate shall be accepted as valid for a further period which shall not exceed five months from the expiry date.

5. If a ship at the time when the Certificate expires is not in a port in which it is to be surveyed, the Administration may extend the period of validity of the Certificate but this extension shall be granted only for the purpose of allowing the ship to complete its voyage to the port in which it is to be surveyed, and then only in cases where it appears proper and reasonable to do so. No Certificate shall be extended for a period longer than three months, and a ship to which such extension is granted shall not, on its arrival in the port in which it is to be surveyed, be entitled by virtue of such extension to leave that port without having a new Certificate. When the renewal survey is completed, the new Certificate shall be valid to a date not exceeding five years from the date of expiry of the existing Certificate before the extension was granted.

6. A Certificate issued to a ship engaged on short voyages which has not been extended under the foregoing provisions of this regulation may be extended by the Administration for a period of grace of up to one month from the date of expiry stated on it. When the renewal survey is completed, the new Certificate shall be

valid to a date not exceeding five years from the date of expiry of the existing Certificate before the extension was granted.

7. In special circumstances, as determined by the Administration, a new Certificate need not be dated from the date of expiry of the existing Certificate as required by paragraph 2.2, 5 or 6 of this regulation. In these special circumstances, the new Certificate shall be valid to a date not exceeding five years from the date of completion of the renewal survey.

8. If an annual survey is completed before the period specified in regulation E-1, then:

1) the Anniversary date shown on the Certificate shall be amended by endorsement to a date which shall not be more than three months later than the date on which the survey was completed;

2) the subsequent annual or intermediate survey required by regulation E-1 shall be completed at the intervals prescribed by that regulation using the new Anniversary date;

3) the expiry date may remain unchanged provided one or more annual surveys, as appropriate, are carried out so that the maximum intervals between the surveys prescribed by regulation E-1 are not exceeded.

9. A Certificate issued under regulation E-2 or E-3 shall cease to be valid in any of the following cases:

1) if the structure, equipment, systems, fittings, arrangements and material necessary to comply fully with this Convention is changed, replaced or significantly repaired and the Certificate is not endorsed in accordance with this Annex;

2) upon transfer of the ship to the flag of another State. A new Certificate shall only be issued when the Party issuing the new Certificate is fully satisfied that the ship is in compliance with the requirements of regulation E-1. In the case of a transfer between Parties, if requested within three months after the transfer has taken place, the Party whose flag the ship was formerly entitled to fly shall, as soon as possible, transmit to the Administration copies of the Certificates carried by the ship before the transfer and, if available, copies of the relevant survey reports;

3) if the relevant surveys are not completed within the periods specified under regulation E-1.1; or

4) if the Certificate is not endorsed in accordance with regulation E-1.1.

SECOND SCHEDULE

FORM OF INTERNATIONAL BALLAST WATER MANAGEMENT CERTIFICATE

INTERNATIONAL BALLAST WATER MANAGEMENT CERTIFICATE

Issued under the provisions of the International Convention for the Control and Management of Ships‘ Ballast Water and Sediments (hereinafter referred to as "the Convention") under the authority of the Government of

Issued under the provisions of the International Convention for the Control and Management of Ships‘ Ballast Water and Sediments (hereinafter referred to as "the Convention") under the authority of the Government of

……
(full designation of the country)

by ……

(full designation of the competent person or

organization authorized under the provisions

of the Convention)

Particulars of ship

Name of ship .....
Distinctive number of letters ……
Port of Registry ……
Gross Tonnage ……
IMO number ……
Date of Construction ……
Ballast Water Capacity (in cubic metre) ……

Details of Ballast Water Management Method(s) Used ……..

Method of Ballast Water Management used ……

Date installed (if applicable) ……
Name of manufacturer (if applicable) ……

The principal Ballast Water Management method(s) employed on this ship is/are:

in accordance with regulation D-1

in accordance with regulation D-2

(describe) .....
the ship is subject to regulation D-4

THIS IS TO CERTIFY:

1 That the ship has been surveyed in accordance with regulation E-1 of the Annex to the Convention; and

2 That the survey shows that Ballast Water Management on the ship complies with the Annex to the Convention.

This certificate is valid until …….. subject to surveys in accordance with regulation E-1 of the Annex to the Convention.

Issued at ……

(Place of issue of certificate)

……..

……

(Date of issue) *(Signature of authorized official issuing the certificate)*

[SEAL OF AUTHORITY]

ENDORSEMENT FOR ANNUAL AND INTERMEDIATE SURVEY(S)

THIS IS TO CERTIFY that a survey required by regulation E-1 of the Annex to the Convention the ship was found to comply with the relevant provisions of the Convention:

Annual survey: Signed .....

(Signature of duly authorized official)

Place .....

Date.....…

(Seal or stamp of the authority, as appropriate)

Annual*/Intermediate survey*: Signed .....

(Signature of duly authorized official)

Place .....

Date.....…

(Seal or stamp of the authority, as appropriate)

Annual*/Intermediate survey*: Signed .....

(Signature of duly authorized official)

Place .....

Date.....…

(Seal or stamp of the authority, as appropriate)

Annual survey: Signed .....

(Signature of duly authorized official)

Place .....

Date.....…

(Seal or stamp of the authority, as appropriate)

---

*Delete as appropriate

ANNUAL/INTERMEDIATE SURVEY IN ACCORDANCE WITH REGULATION E-5.8.3

THIS IS TO CERTIFY that, at an annual/intermediate* survey in accordance with regulation E-5.8.3 of the Annex to the Convention, the ship was found to comply with the relevant provisions of the Convention:

Signed .....

(Signature of authorized official)

Place .....

Date.....….....

(Seal or stamp of the authority, as appropriate)

ENDORSEMENT TO EXTEND THE CERTIFICATE IF VALID FOR LESS THAN 5 YEARS WHERE REGULATION E-5.3 APPLIES

The ship complies with the relevant provisions of the Convention, and this Certificate shall, in accordance with regulation E-5.3 of the Annex to the Convention, be accepted as valid until……

Signed .....

(Signature of authorized official)

Place .....

Date.....….

(Seal or stamp of the authority, as appropriate)

ENDORSEMENT WHERE THE RENEWAL SURVEY HAS BEEN

COMPLETED AND REGULATION E-5.4 APPLIES

The ship complies with the relevant provisions of the Convention and this Certificate shall, in accordance with regulation E-5.4 of the Annex to the Convention, be accepted as valid until ……

Signed .....

(Signature of authorized official)

Place .....

Date.....…

(Seal or stamp of the authority, as appropriate)

*Delete as appropriate

ENDORSEMENT TO EXTEND THE VALIDITY OF THE CERTIFICATE UNTIL REACHING THE PORT OF SURVEY OR FOR A PERIOD OF GRACE WHERE REGULATION E-5.5 OR E-5.6 APPLIES

This Certificate shall, in accordance with regulation E-5.5 or E-5.6* of the Annex to the Convention, be accepted as valid until ……..

Signed .....
(Signature of authorized official)

Place

.....

..

Date.....

.....…

(Seal or stamp of the authority, as appropriate)

ENDORSEMENT FOR ADVANCEMENT OF ANNIVERSARY DATE WHERE REGULATION E-5.8 APPLIES

In accordance with regulation E-5.8 of the Annex to the Convention the new Anniversary date is …….

Signed .....
(Signature of authorized official)

Place

.....

..

Date.....

.....…

(Seal or stamp of the authority, as appropriate)

In accordance with regulation E-5.8 of the Annex to the Convention the new Anniversary date is …….

Signed .....
(Signature of duly authorized official)

Place

.....

..

Date.....

.....…

(Seal or stamp of the authority, as appropriate)

THIRD SCHEDULE

FORM OF BALLAST WATER RECORD BOOK
INTERNATIONAL CONVENTION FOR THE CONTROL AND MANAGEMENT OF SHIPS' BALLAST WATER AND SEDIMENTS

Period From: …….. To: ……..

Name of ship ……

IMO number ……

Gross tonnage ……

Flag ……

Total Ballast Water capacity (in cubic metres) ……...

The ship is provided with a Ballast Water Management plan

Diagram of ship indicating ballast tanks:

1. Introduction

In accordance with regulation B-2 of the Annex to the International Convention for the Control and Management of Ships' Ballast Water and Sediments, a record is to be kept of each Ballast Water operation. This includes discharges at sea and to reception facilities.

2. Ballast Water and Ballast Water Management

—Ballast Water" means water with its suspended matter taken on board a ship to control trim, list, draught, stability, or stresses of a ship. Management of Ballast Water shall be in accordance with an approved Ballast Water Management plan and taking into account Guidelines[3] developed by the Organization.

3. Entries in the Ballast Water Record Book

Entries in the Ballast Water record book shall be made on each of the following occasions:

3.1 When Ballast Water is taken on board:

1. Date, time and location port or facility of uptake (port or lat/long), depth if outside port
2. Estimated volume of uptake in cubic metres
3. Signature of the officer in charge of the operation.

3.2 Whenever Ballast Water is circulated or treated for Ballast Water Management purposes:

1. Date and time of operation
2. Estimated volume circulated or treated (in cubic metres)

3. Whether conducted in accordance with the Ballast Water Management plan

4 Signature of the officer in charge of the operation

3.3 When Ballast Water is discharged into the sea:

1. Date, time and location port or facility of discharge (port or lat/long)

2 Estimated volume discharged in cubic metres plus remaining volume in cubic metres

3 Whether approved Ballast Water Management plan had been implemented prior to discharge

4 Signature of the officer in charge of the operation

5. Whether approved Ballast Water Management plan had been implemented prior to discharge

6. Signature of officer in charge of operation.

3.4 When Ballast water is discharged in a reception facility:

1. Date, time and location of uptake
2. Date, time and location of discharge
3. Port or facility
4. Estimated volume discharge or taken up, in cubic metres
5. Whether approved Ballast Water Management Plan had been implemented prior to discharge.
6. Signature of officer charge of the operation

3.5 Accidental or other exceptional uptake or discharge of Ballast Water:

1. Date and time of occurrence
2. Port or position of the ship at time of occurrence
3. Estimated volume of Ballast Water discharged
4. Circumstances of uptake, discharge, escape or loss, the reason therefore and general remarks.
5. Whether approved Ballast Water Management plan had been implemented prior to discharge
6. Signature of officer in charge of the operation.

3.6 Additional operational procedure and general remarks

4. Volume of Ballast Water

The volume of Ballast Water onboard should be estimated in cubic metres. The Ballast Water record book contains many references to estimated volume of Ballast Water. It is recognised that the accuracy of estimating volumes of ballast is left to interpretation.

RECORD OF BALLAST WATER OPERATIONS

SAMPLE BALLAST WATER OPERATIONS
Name of Ship …….
Distinctive number of letter …….

Date	Item (number)	Record of operations/signature of officers in charge

Signature of Master ……..

FOURTH SCHEDULE

Indicator microbe shall include:

1. Toxicogenic *Vibrio cholerae* (O1 and O139) with less than 1 colony forming unit (cfu) per 100 millilitres or less than 1 cfu per 1 gram (wet weight) zooplankton samples;

2. S*cherichia coli* less than 250 cfu per 100 millilitres;

3. Intestinal Enterococci less than100cfu per 100 millilitres.

Environment Protection (Lists of Harmful Aquatic Organisms and Pathogens) Regulations 2010

GN No. [ ] of 2010

THE ENVIRONMENT PROTECTION ACT 2002

Regulations made by the Minister under section 87 of the Environment Protection Act 2002

1. These regulations may be cited as the Environment Protection (Lists of Harmful Aquatic Organisms and Pathogens) Regulations 2010.

2. In these Regulations -

(1) In this Act, unless otherwise expressly provided –

"laboratory" has the same meaning as in section 3 of the principal Act.

"Administration" means the Registry of Shipping;

"Articles" means the Articles of the International Convention for the Control and Management of Ships Ballast Water and Sediments;

"Convention" means the International Convention for the Control and Management of Ships Ballast Water and Sediments;

"harmful aquatic organisms and pathogens" has the same meaning as in the principal Act and includes the living organisms or substance listed in Schedule 1 or 2;

"Mauritian maritime zones" has the same meaning as in the principal Act;

"Minister" means the Minister to whom responsibility for the subject of environment is assigned;

"officer" has the same meaning as in the principal Act;

"owner" has the same meaning as in the principal Act;

"principal Act" means the Environment Protection Act 2002;

"Registry" has the same meaning as in the principal Act;

"ships" has the same meaning as in the principal Act.

(2) Unless otherwise expressly provided, words and expressions defined in the International Convention for the Control and Management of Ships Ballast Water and Sediments and used in this Act shall have the same meaning as in the International Convention for the Control and Management of Ships Ballast Water and Sediments.

3. List of harmful aquatic organisms and pathogens

(1) No ship shall release its ballast water within the Mauritian maritime zones unless so authorized by a permitted by an officer if the ship's ballast water is found to contain one or more of any of the following:

(a) organisms as listed in Schedule 1;

(b) pathogens as listed in Schedule 2.

(2) The organisms and pathogens listed in Schedules 1 and 2 respectively shall be deemed to be harmful aquatic organisms and pathogens within the meaning of the principal Act.

4. Amendment to lists of harmful aquatic organisms and pathogens

(1) The Minister shall be reviewing the 2 lists at Schedules 1 and 2 every 6-months period as from the date of entry into force of principal Act, in consultation with the Director of Shipping and the National Environmental Laboratory.

(2) Notwithstanding paragraph (1) above, the Minister may convene a review meeting with above persons for the purpose of reviewing any or both Schedules 1 and 2 in addition to the 2 yearly meetings prescribed.

5. Notification to owners

(1) The Administration shall notify the registered owners of Mauritian ships of the contents of the lists in writing within 21 days of the final decision of the contents of the lists.

(2) The Administration shall give due publicity internationally without undue delay about the lists of harmful aquatic organisms and pathogens after each review under paragraph 4 of these Regulations.

Made by the Minister on [*Date to be inserted*] 2010.

_____

SCHEDULE 1

List of harmful aquatic organisms:[74]

[74] List to be made and compiled upon instructions received from the relevant Ministry after consultation as per paras. 3 & 4 above.

SCHEDULE 2

List of harmful aquatic pathogens[75]:

[75] Ibid.

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