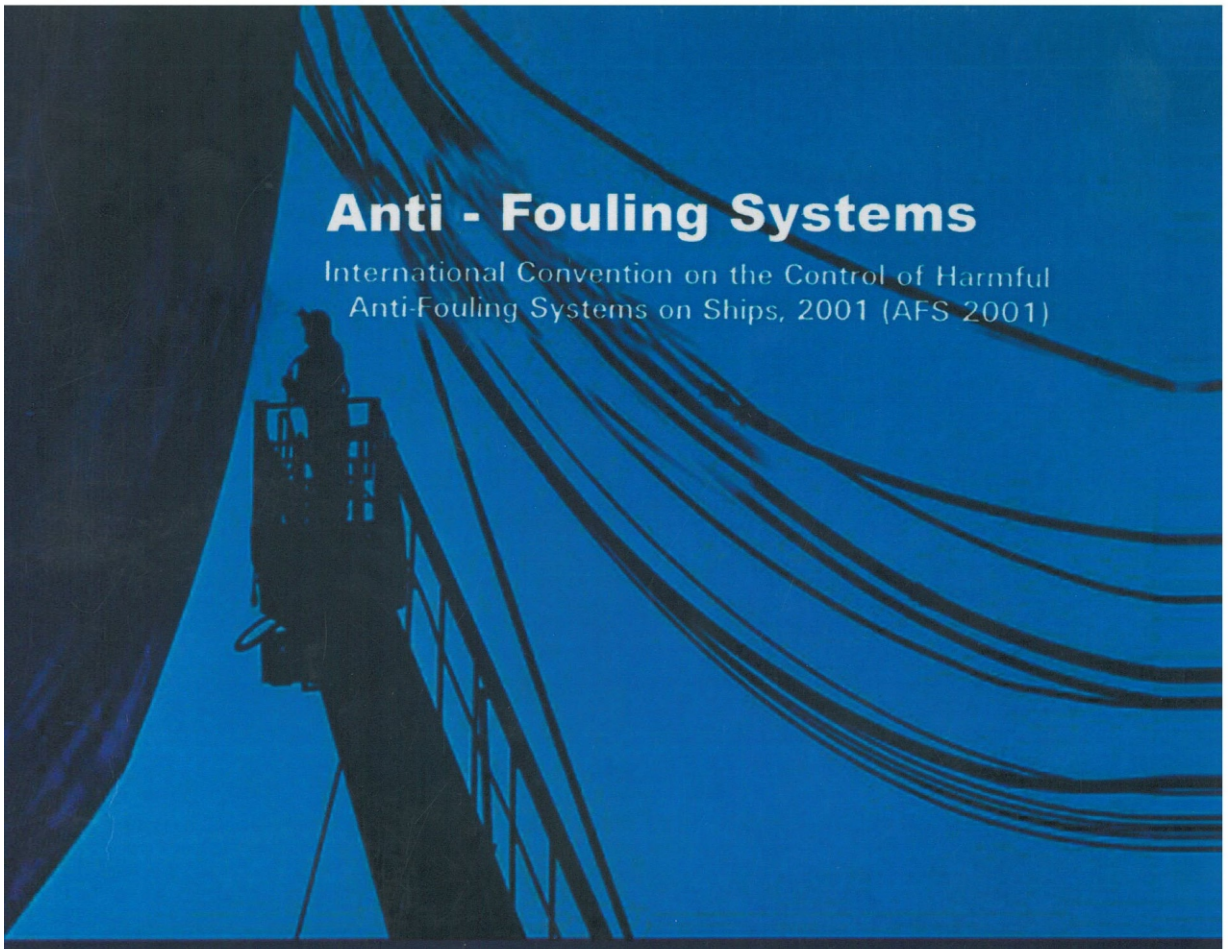


Anti - Fouling Systems

International Convention on the Control of Harmful Anti-Fouling Systems on Ships, 2001 (AFS 2001)

IMO
INTERNATIONAL MARITIME ORGANIZATION

Capt. Ari Wibowo

Anti-Fouling Systems

International Convention on the Control of Harmful Anti-Fouling Systems on Ships, 2001 (AFS 2001)

and

Guidelines for survey and certification of anti-fouling systems on ships (resolution MEPC.102(48)), Guidelines for brief sampling of anti-fouling systems on ships (resolution MEPC.104(49)), and Guidelines for inspection of anti-fouling systems on ships (resolution MEPC.105(49)).

INTERNATIONAL
MARITIME
ORGANIZATION
London, 2005

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INTERNATIONAL
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London, 2005

Foreword

Capt. Ari Wibowo

The harmful effects of anti-fouling systems were considered by the International Maritime Organization's Marine Environment Protection Committee (MEPC) for the first time in 1988, when the Paris Commission requested the MEPC to consider the need for measures to restrict the use of tributyltin (TBT) compounds on seagoing vessels. As a first step, the Committee at its thirtieth session in 1990 adopted resolution MEPC.46(30) on "Measures to control potential adverse impacts associated with the use of tributyltin compounds in anti-fouling paints", which recommends that IMO Member Governments adopt measures to eliminate the use of anti-fouling paint containing TBT on non-aluminium-hulled vessels of less than 25 m in length and eliminate the use of TBT-based anti-fouling paints with an average leaching rate of more than four micrograms of organotin per square centimetre per day. These recommendations were intended to be interim measures until IMO could consider a possible total prohibition of TBT compounds in anti-fouling systems. From 1990 onwards, MEPC was presented with TBT monitoring results which reconfirmed the toxicity of TBT compounds, as well as with information on existing alternatives, including their effectiveness and the risk posed to the marine environment by these systems.

The twenty-first session of the IMO Assembly in 1999 adopted resolution A.895(21) urging MEPC to work towards the expeditious development of a global legally binding instrument to address the harmful effects of anti-fouling systems used on ships. The resolution states that the global instrument, to be developed by MEPC, should ensure a global prohibition of the application of organotin compounds which act as biocides in anti-fouling systems on ships by 1 January 2003 and a complete prohibition on the presence of organotin compounds which act as biocides in anti-fouling systems on ships by 1 January 2008. A working group was established at MEPC, which took on the task of developing such a draft instrument.

In accordance with Article 2(b) of the Convention on the International Maritime Organization, the MEPC at its forty-third session recommended, and the twentieth extraordinary session of the Council decided, to convene a diplomatic conference to consider the adoption of a legal instrument on the control of harmful anti-fouling systems on ships.

In accordance with the decision of the Council, the International Conference on the Control of Harmful Anti-Fouling Systems for Ships, 2001, was convened by IMO and held in London at its Headquarters from 1 to 5 October 2001. The Conference adopted the International Convention on the Control of Harmful Anti-Fouiing Systems on Ships, 2001 (the AFS Convention), together with four Conference resolutions, relating to the

early and effective application of the AFS Convention, future work by the Organization pertaining to the AFS Convention, approval and test methodologies for anti-fouling systems on ships and the promotion of technical co-operation.

Article 11(1)(b) and (2) and regulation 1(4)(a) of annex 4 of the AFS Convention refer to the following guidelines to be developed by the Organization:

.1 Guidelines for survey and certification of anti-fouling systems on ships;

.2 Guidelines for brief sampling of anti-fouling systems on ships; and

.3 Guidelines for inspection of ships anti-fouling systems on ships.

Conference resolution 2 urges the Organization to develop the above-mentioned guidelines as a matter of urgency for them to be adopted before the entry into force of the AFS Convention, with a view to facilitating global and uniform implementation of the AFS Convention.

This 2005 edition, reproduces the texts of the International Convention on the Control of Harmful Anti-Fouling Systems on Ships, 2001, the four Conference resolutions, and the Guidelines developed and adopted by the Organization.

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INTERNATIONAL CONVENTION ON THE CONTROL OF HARMFUL ANTI-FOULING SYSTEMS ON SHIPS, 2001

THE PARTIES TO THIS CONVENTION,

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

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

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

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

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

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

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

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

HAVE AGREED as follows:

Article 1
General obligations

(1) Each Party to this Convention undertakes to give full and complete effect to its provisions in order to reduce or eliminate adverse effects on the marine environment and human health caused by anti-fouling systems.

(2) The annexes form an integral part of this Convention. Unless expressly provided otherwise, a reference to this Convention constitutes at the same time a reference to its annexes.

(3) No provision of this Convention shall be interpreted as preventing a State from taking, individually or jointly, more stringent measures with respect to the reduction or elimination of adverse effects of anti-fouling systems on the environment, consistent with international law.

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

(5) The Parties undertake to encourage the continued development of anti-fouling systems that are effective and environmentally safe.

Article 2
Definitions

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

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

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

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

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

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

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

(7) *Organization* means the International Maritime Organization.

(8) *Secretary-General* means the Secretary-General of the Organization.

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

(10) *Technical Group* is a body comprised of representatives of the Parties, Members of the Organization, the United Nations and its Specialized Agencies, intergovernmental organizations having agreements with the Organization, and non-governmental organizations in consultative status with the Organization, which should preferably include representatives of institutions and laboratories that engage in anti-fouling system analysis. These representatives shall have expertise in environmental fate and effects, toxicological effects, marine biology, human health, economic analysis, risk management, international shipping, anti-fouling systems coating technology, or other fields of expertise necessary to objectively review the technical merits of a comprehensive proposal.

Article 3
Application

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

- **(a)** ships entitled to fly the flag of a Party;
- **(b)** ships not entitled to fly the flag of a Party, but which operate under the authority of a Party; and
- **(c)** ships that enter a port, shipyard, or offshore terminal of a Party, but do not fall within subparagraph (a) or (b).

(2) This Convention shall not apply to any warships, naval auxiliary, or other ships owned or operated by a Party 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.

(3) With respect to the 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
Controls on anti-fouling systems

(1) In accordance with the requirements specified in annex 1, each Party shall prohibit and/or restrict:

- **(a)** the application, re-application, installation, or use of harmful anti-fouling systems on ships referred to in article 3(1)(a) or (b); and

(b) the application, re-application, installation or use of such systems, whilst in a Party's port, shipyard, or offshore terminal, on ships referred to in article 3(1)(c),

and shall take effective measures to ensure that such ships comply with those requirements.

(2) Ships bearing an anti-fouling system which is controlled through an amendment to annex 1 following entry into force of this Convention may retain that system until the next scheduled renewal of that system, but in no event for a period exceeding 60 months following application, unless the Committee decides that exceptional circumstances exist to warrant earlier implementation of the control.

Article 5

Controls of annex 1 waste materials

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

Article 6

Process for proposing amendments to controls on anti-fouling systems

(1) Any Party may propose an amendment to annex 1 in accordance with this article.

(2) An initial proposal shall contain the information required in annex 2, and shall be submitted to the Organization. When the Organization receives a proposal, it shall bring the proposal to the attention of the Parties, Members of the Organization, the United Nations and its Specialized Agencies, intergovernmental organizations having agreements with the Organization and non-governmental organizations in consultative status with the Organization and shall make it available to them.

(3) The Committee shall decide whether the anti-fouling system in question warrants a more in-depth review based on the initial proposal. If the Committee decides that further review is warranted, it shall require the proposing Party to submit to the Committee a comprehensive proposal containing the information required in annex 3, except where the initial proposal also includes all the information required in annex 3. Where the Committee is of the view that there is a threat of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason to prevent a decision to proceed with the evaluation of the proposal. The Committee shall establish a technical group in accordance with article 7.

(4) The technical group shall review the comprehensive proposal along with any additional data submitted by any interested entity and shall evaluate and report to the Committee whether the proposal has demonstrated a

potential for unreasonable risk of adverse effects on non-target organisms or human health such that the amendment of annex 1 is warranted. In this regard:

(a) The technical group's review shall include:

(i) an evaluation of the association between the anti-fouling system in question and the related adverse effects observed either in the environment or on human health, including, but not limited to, the consumption of affected seafood, or through controlled studies based on the data described in annex 3 and any other relevant data which come to light;

(ii) an evaluation of the potential risk reduction attributable to the proposed control measures and any other control measures that may be considered by the technical group;

(iii) consideration of available information on the technical feasibility of control measures and the cost-effectiveness of the proposal;

(iv) consideration of available information on other effects from the introduction of such control measures relating to:

- the environment (including, but not limited to, the cost of inaction and the impact on air quality);
- shipyard health and safety concerns (i.e. effects on shipyard workers);
- the cost to international shipping and other relevant sectors; and

(v) consideration of the availability of suitable alternatives, including a consideration of the potential risks of alternatives.

(b) The technical group's report shall be in writing and shall take into account each of the evaluations and considerations referred to in subparagraph (a), except that the technical group may decide not to proceed with the evaluations and considerations described in subparagraph (a)(ii) through (a)(v) if it determines after the evaluation in subparagraph (a)(i) that the proposal does not warrant further consideration.

(c) The technical group's report shall include, *inter alia*, a recommendation on whether international controls pursuant to this Convention are warranted on the anti-fouling system in question, on the suitability of the specific control measures suggested in the comprehensive proposal, or on other control measures which it believes to be more suitable.

(5) The technical group's report shall be circulated to the Parties, Members of the Organization, the United Nations and its Specialized Agencies, intergovernmental organizations having agreements with the Organization and non-governmental organizations in consultative status with the Organization, prior to its consideration by the Committee. The Committee shall decide whether to approve any proposal to amend annex 1, and any modifications thereto, if appropriate, taking into account the technical group's report. If the report finds a threat of serious or irreversible damage, lack of full scientific certainty shall not, itself, be used as a reason to

prevent a decision from being taken to list an anti-fouling system in annex 1. The proposed amendments to annex 1, if approved by the Committee, shall be circulated in accordance with article 16(2)(a). A decision not to approve the proposal shall not preclude future submission of a new proposal with respect to a particular anti-fouling system if new information comes to light.

(6) Only Parties may participate in decisions taken by the Committee described in paragraphs (3) and (5).

Article 7
Technical groups

(1) The Committee shall establish a technical group pursuant to article 6 when a comprehensive proposal is received. In circumstances where several proposals are received concurrently or sequentially, the Committee may establish one or more technical groups as needed.

(2) Any Party may participate in the deliberations of a technical group, and should draw on the relevant expertise available to that Party.

(3) The Committee shall decide on the terms of reference, organization and operation of the technical groups. Such terms shall provide for protection of any confidential information that may be submitted. Technical groups may hold such meetings as required, but shall endeavour to conduct their work through written or electronic correspondence or other media as appropriate.

(4) Only the representatives of Parties may participate in formulating any recommendation to the Committee pursuant to article 6. A technical group shall endeavour to achieve unanimity among the representatives of the Parties. If unanimity is not possible, the technical group shall communicate any minority views of such representatives.

Article 8
Scientific and technical research and monitoring

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

(2) 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 technical activities undertaken in accordance with this Convention;

(b) marine scientific and technological programmes and their objectives; and

(c) the effects observed from any monitoring and assessment programmes relating to anti-fouling systems.

Article 9
Communication and exchange of information

(1) Each Party undertakes to communicate to the Organization:

(a) a list of the nominated surveyors or recognized organizations which are authorized to act on behalf of that Party in the administration of matters relating to the control of anti-fouling systems in accordance with this Convention for circulation to the Parties for the information of their officers. The Administration shall therefore notify the Organization of the specific responsibilities and conditions of the authority delegated to nominated surveyors or recognized organizations; and

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

(2) The Organization shall make available, through any appropriate means, information communicated to it under paragraph (1).

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

Article 10
Survey and certification

A Party shall ensure that ships entitled to fly its flag or operating under its authority are surveyed and certified in accordance with the regulations in annex 4.

Article 11
Inspections of ships and detection of violations

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

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

(b) a brief sampling of the ship's anti-fouling system that does not affect the integrity, structure, or operation of the anti-fouling system taking into account guidelines developed by the Organization.*

* Refer to the Guidelines for brief sampling of anti-fouling systems on ships adopted by the Marine Environment Protection Committee of the Organization by resolution MEPC.104(49) and attached on page 41 of this publication.

However, the time required to process the results of such sampling shall not be used as a basis for preventing the movement and departure of the ship.

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

(3) If the ship is detected to be in violation of this Convention, the Party carrying out the inspection may take steps to warn, detain, dismiss, or exclude the ship from its ports. A Party taking such action against a ship for the reason that the ship does not comply with this Convention shall immediately inform the Administration of the ship concerned.

(4) Parties shall co-operate in the detection of violations and the enforcement of this Convention. A Party may also inspect a ship when it enters the ports, shipyards, 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 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 the appropriate action may be taken under this Convention.

Article 12
Violations

(1) Any violation of this Convention shall be prohibited and sanctions shall be established therefor 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 laws. 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 one year after receiving the information, it shall so inform the Party which reported the alleged violation.

(2) Any violation of this Convention within the jurisdiction of any Party shall be prohibited and sanctions shall be established therefor 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 concerned such information and evidence as may be in its possession that a violation has occurred.

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* Refer to the Guidelines for inspection of anti-fouling systems on ships adopted by the Marine Environment Protection Committee of the Organization by resolution MEPC.105(49) and attached on page 63 of this publication.

(3) The sanctions established under the laws of a Party pursuant to this article shall be adequate in severity to discourage violations of this Convention wherever they occur.

Capt. Ari Wibowo

Article 13
Undue delay or detention of ships

(1) All possible efforts shall be made to avoid a ship being unduly detained or delayed under article 11 or 12.

(2) When a ship is unduly detained or delayed under article 11 or 12, it shall be entitled to compensation for any loss or damage suffered.

Article 14
Dispute settlement

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 15
Relationship to international law of the sea

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 16
Amendments

(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. In the case of a proposal to amend annex 1, it shall be processed in accordance with article 6, prior to its consideration under this article.
- **(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 an 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 annex 1 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;

(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; or

(3) made a declaration at the time it deposits its instrument of ratification, acceptance or approval of, or accession to, this Convention that amendments to annex 1 shall enter into force for it only after the notification to the Secretary-General of its acceptance with respect to such amendments.

(iii) An amendment to an annex other than annex 1 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 those Parties that have notified their objection to the amendment in accordance with subparagraph (e)(ii) and that have not withdrawn such objection.

(g) **(i)** A Party that has notified an objection under subparagraph (f)(ii)(1) or (iii) 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 or declaration referred to in subparagraph (f)(ii)(2) or (3), respectively, 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 of this article.

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

(5) An addition of a new annex shall be proposed and adopted and shall enter into force in accordance with the procedure applicable to an amendment to an article of this Convention.

(6) Any notification or declaration under this article shall be made in writing to the Secretary-General.

(7) 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 or declaration made under this article.

Article 17
Signature, ratification, acceptance, approval and accession

(1) This Convention shall be open for signature by any State at the Headquarters of the Organization from 1 February 2002 to 31 December 2002 and shall thereafter remain open for accession by any State.

(2) States may become Parties to this 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 Secretary-General and shall state expressly the territorial units to which this Convention applies.

Article 18
Entry into force

(1) This Convention shall enter into force twelve months after the date on which not less than twenty-five States, the combined merchant fleets of which constitute not less than twenty-five per cent 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 into 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 16, any instrument of ratification, acceptance, approval or accession deposited shall apply to the Convention as amended.

Article 19
Denunciation

(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 the deposit of written notification with the Secretary-General, to take effect one year after receipt or such longer period as may be specified in that notification.

Article 20
Depositary

(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 which 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 of this 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 21
Languages

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

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

DONE AT LONDON, this fifth day of October, two thousand and one.

* Signatures omitted.

Annex 1
Controls on anti-fouling systems

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

Annex 2

Required elements for an initial proposal

(1) An initial proposal shall include adequate documentation containing at least the following:

(a) identification of the anti-fouling system addressed in the proposal: name of the anti-fouling system; name of active ingredients and Chemical Abstracts Service Registry Number (CAS number), as applicable; or components of the system which are suspected of causing the adverse effects of concern;

(b) characterization of the information which suggests that the anti-fouling system or its transformation products may pose a risk to human health or may cause adverse effects in non-target organisms at concentrations likely to be found in the environment (e.g., the results of toxicity studies on representative species or bioaccumulation data);

(c) material supporting the potential of the toxic components in the anti-fouling system, or its transformation products, to occur in the environment at concentrations which could result in adverse effects to non-target organisms, human health, or water quality (e. g., data on persistence in the water column, sediments and biota; the release rate of toxic components from treated surfaces in studies or under actual use conditions; or monitoring data, if available);

(d) an analysis of the association between the anti-fouling system, the related adverse effects and the environmental concentrations observed or anticipated; and

(e) a preliminary recommendation on the type of restrictions that could be effective in reducing the risks associated with the anti-fouling system.

(2) An initial proposal shall be submitted in accordance with rules and procedures of the Organization.

Annex 3
Required elements of a comprehensive proposal

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

(a) developments in the data cited in the initial proposal;

(b) findings from the categories of data set out in paragraphs (3)(a), (b) and (c), as applicable, depending on the subject of the proposal and the identification or description of the methodologies under which the data were developed;

(c) a summary of the results of studies conducted on the adverse effects of the anti-fouling system;

(d) if any monitoring has been conducted, a summary of the results of that monitoring, including information on ship traffic and a general description of the area monitored;

(e) a summary of the available data on environmental or ecological exposure and any estimates of environmental concentrations developed through the application of mathematical models, using all available environmental fate parameters, preferably those which were determined experimentally, along with an identification or description of the modelling methodology;

(f) an evaluation of the association between the anti-fouling system in question, the related adverse effects and the environmental concentrations, either observed or expected;

(g) a qualitative statement of the level of uncertainty in the evaluation referred to in subparagraph (f);

(h) a recommendation of specific control measures to reduce the risks associated with the anti-fouling system; and

(i) a summary of the results of any available studies on the potential effects of the recommended control measures relating to air quality, shipyard conditions, international shipping and other relevant sectors, as well as the availability of suitable alternatives.

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

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

Annex 4
Surveys and certification requirements for anti-fouling systems

Regulation 1
Surveys

(1) Ships of 400 gross tonnage and above referred to in article 3(1)(a) engaged in international voyages, excluding fixed or floating platforms, FSUs, and FPSOs, shall be subject to surveys specified below:

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

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

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

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

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

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

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

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

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* Refer to the Guidelines for survey and certification of anti-fouling systems on ships adopted by the Marine Environment Protection Committee of the Organization by resolution MEPC.102(48) and attached on page 33 of this publication.

† Refer to the guidelines adopted by the Organization by resolution A.739(18), as may be amended by the Organization, and the specifications adopted by the Organization by resolution A.789(19), as may be amended by the Organization.

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

(d) In the situation described in subparagraph (c), if the ship is in the port of another Party, the appropriate authorities of the port State shall be notified forthwith. When 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 Administration, surveyor, or organization any necessary assistance to carry out their obligations under this regulation, including any action described in article 11 or 12.

Regulation 2
Issue or endorsement of an International Anti-Fouling System Certificate

(1) The Administration shall require that a ship to which regulation 1 applies is issued with a Certificate after successful completion of a survey in accordance with regulation 1. A Certificate issued under the authority of a Party shall be accepted by the 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.

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

(4) The Certificate shall be drawn up in the form corresponding to the model given in appendix 1 to this annex and shall be written at least in English, French, or Spanish. If an official language of the issuing State is also used this shall prevail in the case of the dispute or discrepancy.

Regulation 3
Issue or endorsement of an International Anti-Fouling System Certificate by another Party

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

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

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

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

Regulation 4
Validity of an International Anti-Fouling System Certificate

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

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

(b) 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 this Convention. 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 a copy of the Certificates carried by the ship before the transfer and, if available, a copy of the relevant survey reports.

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

Regulation 5
Declaration on Anti-Fouling System

(1) The Administration shall require a ship of 24 metres or more in length, but less than 400 gross tonnage engaged in international voyages and to which article 3(1)(a) applies (excluding fixed or floating platforms, FSUs, and FPSOs) to carry a Declaration signed by the owner or owner's authorized

agent. Such Declaration shall be accompanied by appropriate documentation (such as a paint receipt or a contractor invoice) or contain appropriate endorsement.

(2) The Declaration shall be drawn up in the form corresponding to the model given in appendix 2 to this annex and shall be written at least in English, French, or Spanish. If an official language of the State whose flag the ship is entitled to fly is also used, this shall prevail in the case of a dispute or discrepancy.

Appendix 1 to annex 4

MODEL FORM OF INTERNATIONAL ANTI-FOULING SYSTEM CERTIFICATE

INTERNATIONAL ANTI-FOULING SYSTEM CERTIFICATE

(This certificate shall be supplemented by a Record of Anti-Fouling Systems)

(Official seal) *(State)*

Issued under the
International Convention on the Control of Harmful Anti-Fouling Systems on Ships
under the authority of the Government of

. . . . . .
(name of the State)

by

. . . . . .
(person or organization authorized)

When a Certificate has been previously issued, this Certificate replaces the certificate dated . . . . . .

Particulars of ship[1]

Name of ship . . . . . .

Distinctive number or letters . . . . . .

Port of registry . . . . . .

Gross tonnage . . . . . .

IMO number[2] . . . . . .

An anti-fouling system controlled under annex 1 has not been applied during or after construction of this ship ☐

An anti-fouling system controlled under annex 1 has been applied on this ship previously, but has been removed by . . . . . *(insert name of the facility)* on . . . . . *(date)* ☐

An anti-fouling system controlled under annex 1 has been applied on this ship previously, but has been covered with a sealer coat applied by . . . . . *(insert name of the facility)* on . . . . . *(date)* ☐

An anti-fouling system controlled under annex 1 was applied on this ship prior to . . . . . *(date)*,[3] but must be removed or covered with a sealer coat prior to . . . . . *(date)*;[4] ☐

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[1] Alternatively, the particulars of the ship may be placed horizontally in boxes.

[2] In accordance with the IMO Ship Identification Number Scheme adopted by the Organization with Assembly resolution A.600(15).

[3] Date of entry into force of the control measure.

[4] Date of expiration of any implementation period specified in article 4(2) or annex 1.

THIS IS TO CERTIFY THAT:

1 the ship has been surveyed in accordance with regulation 1 of annex 4 to the Convention; and

2 the survey shows that the anti-fouling system on the ship complies with the applicable requirements of annex 1 to the Convention.

Issued at .....

(Place of issue of Certificate)

....

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

Date of completion of the survey
on which this certificate is issued: .....

MODEL FORM OF RECORD OF ANTI-FOULING SYSTEMS

RECORD OF ANTI-FOULING SYSTEMS

This Record shall be permanently attached to the International Anti-Fouling System Certificate

Particulars of ship

Name of ship: .....

Distinctive number or letters: .....

IMO number: .....

Details of anti-fouling system(s) applied

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

.....

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

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

.....

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

.....

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

.....

Active ingredient(s) and their Chemical Abstracts Service Registry Number(s) (CAS number(s)) .....

.....

Type(s) of sealer coat, if applicable .....

.....

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

.....

Date of application of sealer coat .....

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

Issued at .....

(Place of issue of Record)

....

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

Endorsement of the Records[5]

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

Details of anti-fouling system(s) applied

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

. . . . . .

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

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

. . . . . .

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

. . . . . .

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

. . . . . .

Active ingredient(s) and their Chemical Abstracts Service Registry Number(s) (CAS number(s)) . . . . . .

. . . . . .

Type(s) of sealer coat, if applicable . . . . . .

. . . . . .

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

. . . . . .

Date of application of sealer coat . . . . . .

Signed: . . . . . .

(Signature of authorized official issuing the Record)

Place: . . . . . .

Date:[6] . . . . . .

(Seal or stamp of the authority)

[5] This page of the Record shall be reproduced and added to the Record as considered necessary by the Administration.

[6] Date of completion of the survey on which this endorsement is made.

Appendix 2 to annex 4
MODEL FORM OF DECLARATION ON ANTI-FOULING SYSTEM

DECLARATION ON ANTI-FOULING SYSTEM

Drawn up under the
International Convention on the Control of Harmful Anti-Fouling Systems on Ships

Name of ship . . . . . .
Distinctive number or letters . . . . . .
Port of registry . . . . . .
Length . . . . . .
Gross tonnage . . . . . .
IMO number (if applicable) . . . . . .

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

. . . . . .

RESOLUTIONS ADOPTED BY THE CONFERENCE

Resolution 1

Early and effective application of the International Convention on the Control of Harmful Anti-Fouling Systems on Ships

THE CONFERENCE,

HAVING ADOPTED the International Convention on the Control of Harmful Anti-Fouling Systems on Ships,

RECALLING that resolution A.895(21), adopted by the Assembly of the International Maritime Organization on 25 November 1999, *inter alia*, agrees that a legally binding instrument should ensure a global prohibition of the application of organotin compounds which act as biocides in anti-fouling systems on ships by 1 January 2003,

NOTING that article 18 of the Convention provides that it shall enter into force twelve months after the date on which not less than twenty-five States, the combined merchant fleets of which constitute not less than twenty-five per cent of the gross tonnage of the world's merchant shipping, have become Parties to it in accordance with article 17 of the Convention,

NOTING ALSO that annex 1 of the Convention stipulates that organotin compounds which act as biocides in anti-fouling systems shall not be applied or re-applied on ships on or after 1 January 2003,

BEING AWARE that the time remaining until 1 January 2003 may not be sufficient to enable entry into force of the Convention by that date,

DESIRING that the substances addressed by annex 1 of the Convention will cease to be applied on ships as from 1 January 2003,

1. REQUESTS Member States of the Organization to do the utmost to prepare for consent to be bound by the Convention as a matter of urgency;

2. URGES the relevant industries involved to refrain from marketing, sale and application of the substances controlled by annex 1 of the Convention.