



IMO'S RESPONSE  
TO CURRENT  
ENVIRONMENTAL  
CHALLENGES  
2007

# AFS CONVENTION

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



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MARITIME  
ORGANIZATION

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### The Problem

Ship-fouling is the unwanted growth of biological material – such as barnacles and algae – on ships' surface immersed in water. Anti-fouling paints are used to coat the bottoms of ships to prevent this fouling and to enable the ships to travel faster.

For the last 20 years, scientific studies have shown that certain anti-fouling systems, specifically the Tributyltin (TBT)-based anti-fouling paints, pose a substantial risk of toxicity and may have significant chronic impacts at the species, habitat and ecosystem levels. Human health may also be at risk as a result of the consumption of affected seafood.

### The Response

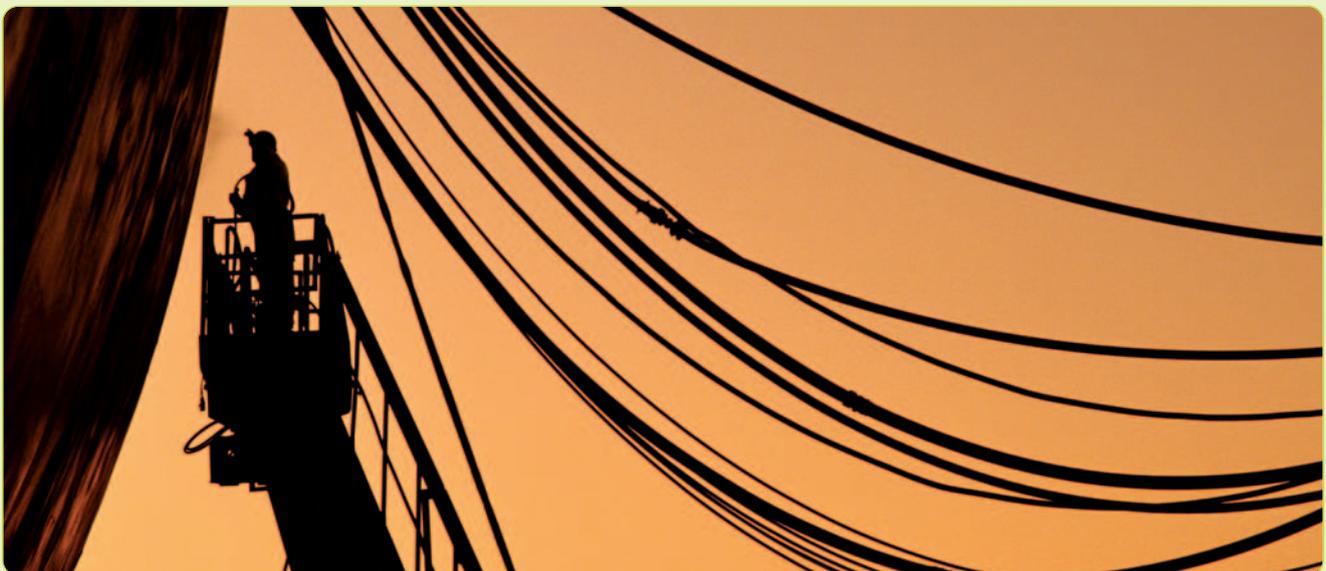
The international community responded to this serious marine environmental issue by adopting the Anti-Fouling Systems (AFS) Convention in an international conference convened in October 2001 at IMO's Headquarters in London. The Convention is aimed at protecting the marine environment and human health from adverse effects of anti-fouling systems on ships by phasing out the use of harmful organotin compounds

as biocides in anti-fouling paints and by establishing a mechanism to prevent the potential future use of other harmful substances in anti-fouling systems.

The Convention will enter into force 12 months after 25 States representing 25% of the world's merchant shipping tonnage have ratified it.

### AFS Convention – what are the salient features ?

- Under the AFS Convention, “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.
- The Convention applies to all ships either registered in a Party or operating under the authority of a Party, as well as any other ships that enter a port, shipyard or offshore terminal of a Party. It also applies to fixed or floating platforms, floating storage units (FSUs) and floating production storage and off-loading units (FPSOs) used by the oil production industry.
- Parties to the AFS Convention agree to give full and complete effect to its provisions and ensure





that, by 1 January 2003, all ships do not apply or re-apply organotin compounds which act as biocides in anti-fouling systems. Furthermore, Parties agree to ensure that, by 1 January 2008, ships shall either not bear such compounds on their hulls or external parts or surfaces, or shall bear a coating that forms a barrier to such compounds leaching from the underlying non-compliant anti-fouling systems.

- The Convention requires that wastes from the application or removal of TBT-based paints are controlled in a safe and environmentally sound manner and that ships are surveyed and certified in accordance with regulations contained in Annex 4, which forms an integral part of this instrument.
- Perhaps one of the most important provisions of the AFS Convention is contained in Article 6, which allows for the ban of future anti-fouling systems that pose a threat of serious or irreversible damage to the marine environment and/or human health.

## Who can benefit?

Parties to the AFS Convention can benefit from:

- Standardized enforcement of a full range of controls on anti-fouling paints on their ships and foreign ships that enter the ports, shipyards, or offshore terminals under their jurisdiction.
- Participating in the process of proposing amendments to controls on anti-fouling systems through an established mechanism to prevent the potential future use of other harmful substances in such systems.
- The exchange of new research and development information, best practices and practical experiences in the control of harmful anti-fouling systems.

Shipping industry can benefit from:

- A uniform international regime regarding the anti-fouling systems as opposed to a plethora of unilateral actions by individual countries.
- The incentive offered by a standardized regime to research and development sector towards finding new and cost-effective solutions to this matter.
- Development of anti-fouling systems that are more effective, allow better application and are environmentally safe.

## The need for urgent action

Since the adoption of the AFS Convention, the Secretary-General of IMO has emphasized on many occasions the importance of its early entry into force and effective implementation and the concern has remained that, more than six years after its adoption, the number of States that have signed or acceded to this instrument is still not enough to bring it into force.

The Organization has already, through the Integrated Technical Co-operation Programme, co-ordinated and managed a number of activities, aiming at assisting in the implementation of the AFS Convention. Governments experiencing difficulties in the process of becoming Parties are urged to inform the Organization of the circumstances thereof, so that consideration can be given to taking appropriate action to provide the necessary technical assistance.

In light of the ubiquitous global presence of TBT, in particular in ocean-going species, suggesting continued contamination in open ocean and the concern with hot-spot areas linked with sediment contamination, the only option is the rapid ratification of the AFS Convention in order to eliminate a major source of a chemical which is still considered to be the most toxic chemical to be deliberately released into the marine environment.



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