

For discussion on
22 January 2018

Legislative Council Panel on Economic Development

Incorporating in Local Legislation the Requirements of the International Code for Ships Operating in Polar Waters of the International Maritime Organization

Merchant Shipping (Safety) Ordinance (Cap. 369)

Merchant Shipping (Prevention and Control of Pollution)

Ordinance (Cap. 413)

Merchant Shipping (Seafarers) Ordinance (Cap. 478)

Purpose

The International Maritime Organization (“IMO”) has adopted an International Code for Ships Operating in Polar Waters (“Polar Code”) to provide for safe ship operation and environmental protection in polar waters (i.e. in Arctic and Antarctic waters). This paper seeks Members’ comment on the legislative proposal to incorporate the mandatory requirements of the Polar Code in local legislation.

Background

2. Owing to the low temperatures and extreme weather conditions around the two poles, ships navigating in polar waters are exposed to more challenging navigational conditions. IMO has therefore adopted the Polar Code which sets out the requirements relating to safety of ship operation, protection of marine environment and seafarer competence. The Polar Code came into force in 2017. The requirements therein are implemented through three IMO conventions, namely, the International Convention for the Safety of Life at Sea (“SOLAS”), the International Convention for the Prevention of Pollution from Ships

(“MARPOL”) and the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (“STCW Convention”).

3. In Hong Kong, the requirements of SOLAS, MARPOL and the STCW Convention are implemented respectively through the Merchant Shipping (Safety) Ordinance (Cap. 369), the Merchant Shipping (Prevention and Control of Pollution) Ordinance (Cap. 413), the Merchant Shipping (Seafarers) Ordinance (Cap. 478), as well as their respective subsidiary legislation. We propose to make two new pieces of subsidiary legislation and amend four existing pieces of subsidiary legislation to incorporate the mandatory requirements of the Polar Code into our local legislation. The requirements would apply to all Hong Kong-registered ships operating in polar waters.

Legislative Proposal

(i) Safety of Ship Operation

4. Mandatory requirements of the Polar Code relating to safety of ships will be incorporated into a new subsidiary legislation to be made under the Merchant Shipping (Safety) Ordinance (Cap. 369). The key requirements include —

- (a) ***Polar Ship Certificate*** — Ships intending to operate in polar waters will need to apply for a polar ship certificate from their respective flag administrations. The ship will be classified into one of three categories (Category A, Category B and Category C), depending on factors including where in the polar waters the ship is intended to operate and the seasons in which it will operate there. Category A ships operate in the most severe ice conditions where Category C ships operate in the least severe ice conditions. To obtain the Polar Ship Certificate, a ship is required to undergo an assessment which will take into account the anticipated range of operating conditions and hazards the ship may encounter in polar waters; the assessment result has to be accepted by the flag administration.
- (b) ***Means for removing snow and ice*** — Ships operating in polar waters are likely to be exposed to different levels of snow throughout their voyage. Accumulation of snow or ice on deck or in equipment will affect a ship’s safety and stability. As such, IMO requires ships operating in polar waters to have effective means to remove and

prevent snow and ice accumulation. It also requires such means be stipulated in the Polar Ship Certificate for the ship concerned. Different ships may have different ways to remove and prevent snow and ice accumulation. For instance, ships can install heating cables around door frames and hatch covers, or they can have steam and hot water spray available on board for seafarers to remove the snow and ice.

- (c) ***Polar Water Operational Manual*** — Ships operating in polar waters are required to keep on board a polar water operational manual, which contains information that assists seafarers in making decision when they encounter different ice and weather conditions. The Polar Water Operational Manual should set out the procedures for seafarers to follow in different scenarios throughout their voyage in polar waters, including the procedures for operating equipment under low temperatures, the procedures for maintaining the safety and stability of ships when trapped in ice for a prolonged period, and the contact information of emergency response services if and when accidents occur.

(ii) Protection of Marine Environment

5. We propose to incorporate the mandatory requirements relating to protection of marine environment in polar waters into four existing pieces of subsidiary legislation¹ under the Merchant Shipping (Prevention and Control of Pollution) Ordinance (Cap. 413). The key requirements include —

- (a) ***Discharge restrictions*** — To protect the marine resources and animal species in polar waters, no discharge of oil or oily mixtures, noxious liquid substances (“NLS”) or mixtures containing NLS, plastic garbage and animal carcasses into polar waters will be allowed. Discharge of sewage is permitted subject to certain prescribed conditions, including having an approved sewage treatment plant on ships for dilution.

¹ The four pieces of subsidiary legislation are:

- i. Merchant Shipping (Prevention of Oil Pollution) Regulations (Cap. 413A);
- ii. Merchant Shipping (Control of Pollution by Noxious Liquid Substances in Bulk) Regulations (Cap. 413B);
- iii. Merchant Shipping (Prevention of Pollution by Sewage) Regulation (Cap. 413K); and
- iv. Merchant Shipping (Prevention of Pollution by Garbage) Regulation (Cap. 413O).

- (b) ***Prevention of oil leakage and accidental discharge of oil from ships*** — To prevent oil leakage and accidental discharge of oil from ships, the oil tanks of ships belonging to Category A or Category B and are constructed on or after 1 January 2017 are required to be installed with a minimum distance of 0.76 metres from the ship's surface. In addition, oil tankers belonging to Category A or Category B and are constructed on or after 1 January 2017 are required to have a double hull and double bottom. As ships constructed on or after 1 January 2017 and intended to operate in polar waters have been informed of the relevant requirements prior to their construction, they should already be in compliance with these requirements.

(iii) Seafarer Competence

6. Seafarers working on ships operating in polar waters must receive training appropriate to their assigned shipboard duties. Seafarers who wish to receive such training may attend courses offered by parties to the STCW Convention. Mandatory requirements relating to seafarer competence will be incorporated into a new subsidiary legislation to be made under the Merchant Shipping (Seafarers) Ordinance (Cap. 478). The key requirements include —

- (a) ***Basic Training*** — Masters, chief mates² and officers in charge of navigational watches on ships operating in areas of less than 10% ice coverage within polar waters should obtain a Basic Training Certificate. To qualify for that, seafarers are required to be familiar with knowledge including different types and characteristics of ice structures, water currents in ice and the differential movement of icebergs. They are also required to have knowledge of operating and assessing the performance of a ship in ice or in low temperatures and assessing potential risks when entering ice-covered waters.
- (b) ***Advanced Training*** — Masters and chief mates on ships operating in areas of not less than 10% ice coverage within polar waters should also obtain an Advanced Training Certificate on top of the Basic Training Certificate. To qualify for that, they are required to have the knowledge and ability to operate a ship and conduct a voyage in

² Generally speaking, a chief mate is responsible to the master (or captain) for the safety and security of the ship. The responsibilities of a chief mate include cargo operation, the crew's welfare and training in areas such as safety, firefighting, search and rescue. A chief mate is sometimes referred to as a first mate or first officer.

polar waters. They have to be able to develop safe routing and passage planning to avoid ice as far as possible in a voyage, communicate with an icebreaker and rescue coordination centres if needed and identify potential navigational hazards in ice-covered waters. They will also be required to maintain the safety of crew members by understanding the procedures and techniques for abandoning ships and survival in polar waters.

Consultation

7. The Shipping Consultative Committee of the Marine Department has been consulted. Members supported the legislative proposal.

Advice Sought

8. Members are invited to comment on the proposal. Subject to Members' views, we plan to introduce the legislative proposal into the Legislative Council by end 2018.

Transport and Housing Bureau
Marine Department
January 2018