

For discussion on  
23 May 2022

## **Legislative Council Panel on Economic Development**

### **Proposed Legislative Amendments to Implement the Latest Requirements of the International Maritime Organization**

#### **PURPOSE**

This Paper consults Members on five legislative proposals<sup>1</sup> to implement the latest amendments to the three conventions of the International Maritime Organization (“IMO”), namely the International Convention for the Prevention of Pollution from Ships, 1973 (“MARPOL”)<sup>2</sup>, the International Convention on the Control of Harmful Anti-Fouling Systems on Ships, 2001 (“AFS Convention”)<sup>3</sup> and the International Maritime Dangerous Goods Code (“IMDG Code”)<sup>4</sup>, with regard to the following aspects:

- (i) the prohibition on the use and carriage for use as fuel of heavy fuel oil (“HFO”) by ships in Arctic waters;
- (ii) the exemptions of unmanned non-self-propelled

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<sup>1</sup> These five legislative proposals will involve amendments to eight pieces of local subsidiary legislation, details of which are set out in the ensuing paragraphs.

<sup>2</sup> Annexes to MARPOL govern various substances relating to regulations for the prevention of pollution by oil (Annex I); regulations for the control of pollution by noxious liquid substances in bulk (Annex II); regulations for the prevention of pollution by harmful substances carried by sea in packaged form (Annex III); regulations for the prevention of pollution by sewage from ships (Annex IV); regulations for the prevention of pollution by garbage from ships (Annex V); and regulations for the prevention of air pollution from ships (Annex VI).

<sup>3</sup> The International Convention on the Control of Harmful Anti-fouling Systems on Ships prohibits the use of harmful organotins in anti-fouling paints on ships and establishes a mechanism to prevent the potential future use of other harmful substances in anti-fouling systems. Anti-fouling paints are used to coat the bottoms of ships to prevent sealife such as algae and molluscs attaching themselves to the hull, thereby slowing down the ship and increasing fuel consumption.

<sup>4</sup> Different parts of the IMDG Code contain provisions relating to General Provisions, Definitions and Training (Part 1); Classification (Part 2); Dangerous Goods List, Special Provisions, Exceptions (Part 3); Packing and Tank Provisions (Part 4); Consignment Procedures (Part 5); Construction and Testing of Packagings, Intermediate Bulk Containers, Large Packagings, Portable Tanks, Multiple Element Gas Containers, and Road Tank Vehicles (Part 6); and Provisions Concerning Transport Operations (Part 7).

- (“UNSP”) barges from survey and certification requirements;
- (iii) the controls on cybutryne for use as a biocide in the anti-fouling systems of ships;
- (iv) the new requirements of certain Greenhouse Gases (GHG) Emissions reduction measures; and
- (v) regular revision of the IMDG Code.

## **LEGISLATIVE PROPOSALS**

### **I. Prohibition on the use and carriage for use as fuel of HFO by ships in Arctic waters**

#### ***Background***

2. Annex I to MARPOL sets out the requirements for preventing or controlling oil pollution caused by ships. To protect the fragile Arctic region from the risk of HFO spills and reduce the impact on the Arctic of Black Carbon emissions from international shipping, the IMO has adopted amendments in relation to the prohibition on the use and carriage for use as fuel of heavy fuel oil by ships in Arctic waters. The new amendments will come into force globally on 1 November 2022.

#### ***Legislative proposal***

3. In Hong Kong, the requirements of Annex I of MARPOL are implemented by virtue of the Merchant Shipping (Prevention of Oil Pollution) Regulations (Cap. 413A) (“the Oil Pollution Regulation”). The new requirements therein apply to all Hong Kong registered ocean-going vessels (“OGVs”) when operating in Arctic waters. To reflect the new requirements, we propose to amend the Oil Pollution Regulation.

### **II. Exemption of UNSP barges from survey and certification requirements**

#### ***Background***

4. Annex I to MARPOL sets out the requirements for preventing or

controlling oil pollution caused by ships, Annex IV to MARPOL contains requirements to control pollution of the sea by sewage and Annex VI to MARPOL sets out the requirements for preventing or controlling air pollution caused by ships. To formalize the exemption from survey and certification requirements applicable to UNSP barges<sup>5</sup> under Annexes I, IV and VI of MARPOL, with the aim to reduce the administrative burden of flag States, port States and relevant parties, the IMO amended Annexes I, IV and VI to MARPOL to specify the exemption requirements for UNSP barges. The new amendments will come into force globally on 1 November 2022.

### ***Legislative Proposal***

5. In Hong Kong, the requirements of Annexes I, IV and VI to MARPOL are implemented by virtue of the Oil Pollution Regulation, the Merchant Shipping (Prevention of Pollution by Sewage) Regulation (Cap. 413K) (“the Sewage Pollution Regulation”) and the Merchant Shipping (Prevention of Air Pollution) Regulation (Cap. 413P) (“the Air Pollution Regulation”) respectively. The new requirements therein apply to all Hong Kong registered UNSP barges wherever they may be, and all non-Hong Kong registered UNSP within the waters of Hong Kong. We propose to amend the Oil Pollution Regulation, the Sewage Pollution Regulation and the Air Pollution Regulation to implement the relevant amendments of Annexes I, IV and VI to MARPOL.

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<sup>5</sup> Under the latest amendments to **Annexes I, IV and VI of MARPOL**, an unmanned non-self-propelled (UNSP) barge means a barge that:

- (a) is not propelled by mechanical means;
- (b) carries no oil (as defined in regulation 1.1 of Annex I);
- (c) has no machinery fitted that may use oil or generate oil residue (sludge);
- (d) has no oil fuel tank, lubricating oil tank, oily bilge water holding tank and oil residue (sludge) tank;
- (e) has neither persons nor living animals on board;
- (f) is not used for holding sewage during transport;
- (g) has no arrangements that could produce sewage as defined in regulation 1.3 of Annex IV; and
- (h) has no system, equipment and/or machinery fitted that may generate emissions regulated by Annex VI.

### **III. Controls on cybutryne for use as a biocide in the anti-fouling systems on ships**

#### ***Background***

6. AFS Convention sets out the requirements to prevent and control the use of harmful substances in anti-fouling systems (“AFS”) on ships. In addition to the original requirements of prohibiting the use of organotin compounds that acts as biocides in the AFS, the IMO adopted new amendments to include controls on the biocide cybutryne in AFS. Such amendments will come into force globally on 1 January 2023.

#### ***Legislative Proposal***

7. In Hong Kong, the requirements of AFS Convention are implemented by virtue of the Merchant Shipping (Control of Harmful Anti-Fouling Systems on Ships) Regulation (Cap. 413N) (“the AFS Regulation”). The new requirements therein apply to all Hong Kong ships wherever they may be, and all non-Hong Kong ships within the waters of Hong Kong. To reflect the new requirements of the AFS Convention, we propose to amend the AFS Regulation.

### **IV. New requirements of GHG Emissions measures**

#### ***Background***

8. Annex VI of MARPOL sets out the requirements for preventing or controlling air pollution caused by ships. In response to climate change, the IMO adopted the Initial IMO Strategy on the reduction of greenhouse gas (“GHG”) emissions from ships<sup>6</sup>. To achieve the goal of the Initial IMO Strategy, the IMO adopted amendments to Annex VI of MARPOL to implement new GHG emissions control measures<sup>7</sup>. The

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<sup>6</sup> The Initial IMO Strategy was adopted by IMO under the Resolution MEPC.304(72) on 13 April 2018 to reduce GHG emission with the aim to reduce the carbon dioxide emission of international shipping by at least 40% by 2030, pursuing efforts towards 70% by 2050, as compared to 2008, and that the total annual GHG emission from international shipping should be reduced by at least 50% by 2050, as compared to 2008 whilst pursuing efforts towards phasing them out.

<sup>7</sup> The measures have introduced the following indicators and plan:

(i) Energy Efficiency Existing Ship Index (EEXI) is a carbon design/technical efficiency indicator which is applicable to most in-service vessels over 400 Gross Tonnes (GT) and operating internationally.

new amendments will come into force globally on 1 November 2022.

### ***Legislative proposal***

9. In Hong Kong, the requirements of Annex VI of MARPOL are implemented by virtue of the Air Pollution Regulation. The new requirements therein apply to all Hong Kong registered OGVs wherever they may be, and all non-Hong Kong registered OGVs within the waters of Hong Kong. In order to ensure our local regulation is in line with the latest amendments of Annex VI to MARPOL, we propose to amend the Air Pollution Regulation.

## **V. Regular revision of existing substances or introduction of new substances for dangerous goods**

### ***Background***

10. The IMDG Code sets out the requirements for maritime transport of dangerous goods in packaged form. To keep pace with the latest development and changes in the marine transportation industry, the IMDG Code is scheduled to amend every two years. IMO adopted amendments to the IMDG Code, which will come into force internationally on 1 June 2022, for updating the technical and transportation requirements of existing substances and inclusion of new substances as dangerous goods in the IMDG Code.

### ***Legislative Proposal***

11. In Hong Kong, the requirements of the IMDG Code are implemented through the Merchant Shipping (Safety) (Fire Protection) (Ships Built Before 25 May 1980) Regulations (Cap. 369W), the Merchant Shipping (Safety) (Fire Appliances) (Ships Built On or After 25 May 1980 but Before 1 September 1984) Regulations (Cap. 369X); and the Merchant Shipping (Safety) (Fire Protection) (Ships Built On or After 1 September

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(ii) Carbon Intensity Indicator (CII) is an in-service/operational efficiency indicator which measures a vessel's carbon intensity over time.

(iii) SEEM Plan is the Ship Energy Efficiency Management Plan which is applicable to all ships 400GT and above engaged in international voyages. SEEM Plan is ship-specific and provides a practical approach for ship owners and operators to manage operations and improve efficiency performance over time.

1984) Regulations (Cap. 369Y) (collectively referred to as “the Fire Safety Regulations”) for OGVs. For local vessels, the requirements for the carriage of dangerous goods according to the IMDG Code are set out in the Merchant Shipping (Local Vessels) (General) Regulation (Cap. 548F) (“Local Vessels Regulation”).

12. The latest amendments to the IMDG Code will apply to all Hong Kong ships wherever they may be, and all non-Hong Kong ships within the waters of Hong Kong as long as they are carrying dangerous goods in packaged form. To implement the latest version of the IMDG Code in Hong Kong, we propose to amend the Fire Safety Regulations and the Local Vessels Regulation.

## **CONSULTATION**

13. The Hong Kong Fleet Operation Advisory Committee and the Local Vessels Advisory Committee of the Marine Department (“MD”) were consulted in March 2022 on the abovementioned legislative proposals to implement the latest requirements to the MARPOL, the IMDG Code and the AFS Convention. The members of the High Speed Craft Consultative Committee were also consulted in April 2022 on the abovementioned legislative proposal to implement the amendments made under the AFS convention. No adverse comments had been received from members of the three committees.

## **ADVICE SOUGHT**

14. Members are invited to comment on the proposals. Subject to the drafting progress, we plan to introduce the legislative proposals into the Legislative Council for negative vetting in the first half of 2022 to ensure a timely implementation of the latest IMO requirements in Hong Kong.

**Transport and Housing Bureau  
Marine Department  
May 2022**