CYPRUS SHIPPING CHAMBER
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To: All Members
CC: Marine Committee
Health, Safety and Environment (HSE) Committee
Manning and Training (M&T) Committee

08 January 2020

Circular No. 03/2020

Dear Member,

Implementation of Regulation D-2 of the BWM Convention

For the second consecutive year, the Secretariat has initiated a survey on the implementation of Regulation D-2 of the International Convention for the Control and Management of Ship's Ballast Water and Sediments (BWM Convention). This survey aimed to inform the Chamber on the current status of the implementation of Regulation D-2 and issues encountered by Members who have installed and/or retrofitted an approved Ballast Water Treatment System (BWTS) on board their ships.

The consolidated feedback is presented in this Circular and will also be forwarded to the International Chamber of Shipping (ICS) to assist their efforts to introduce necessary changes to the BWM Convention after the expiration of the IMO's Experience Building Phase (EBP) in 2022.

Implementation Schedule for Regulation D-2 of the BWM Convention:

As per MEPC 71, new vessels[1] shall comply with Regulation D-2 on delivery. This means that new building vessels shall install on board an approved BWTS.

Existing vessels[2] shall retrofit an approved BWTS on board *on the first renewal* MARPOL/IOPP survey after 08 September 2017 if:

1. the renewal MARPOL/IOPP survey is completed on or after 08 September 2019; or
2. a renewal MARPOL/IOPP survey is completed on or after 08 September 2014 but before 08 September 2017.

Therefore, a vessel undergone a renewal MARPOL/IOPP survey between 08 September 2014 to 08 September 2017 must be retrofitted with an approved BWTS at the first MARPOL/IOPP survey due after 08 September 2017.

Existing vessels[2] shall retrofit an approved BWTS on board *on the second renewal* MARPOL/IOPP survey after 08 September 2017 if:

1. the first renewal MARPOL/IOPP survey after 08 September 2017 is completed before 08 September 2019; and
2. if the conditions to complete at the first renewal IOPP (outlined above) are not met.

[1] New vessel means a vessel constructed (keel laid date) on or after 08 September 2017.
[2] Existing vessel means a vessel constructed (keel laid date) before 08 September 2017.

Therefore, a vessel that will undergo a renewal MARPOL/IOPP survey between 08 September 2017 to 08 September 2019 that has not been de harmonized shall be retrofitted with an approved BWTS at the second MARPOL/IOPP survey after 08 September 2017.

Existing vessels[2] that MARPOL/IOPP survey does not apply (i.e. oil tankers of less than 150 GT and other vessels of less than 400 GT) shall comply with the retrofitting of an approved BWTS no later than 08 September 2024 or from a date decided by the Administration.

Type approval of BWTS:

BWTS installed[3] on or after 28 October 2020 to comply with Regulation D-2 of the BWM Convention must be approved in accordance with the IMO Code for Approval of Ballast Water Management Systems (BWMS Code). Refer to IMO Resolution MEPC.300(72).

Members must ensure that the BWTS they choose to install have the necessary approval and if this is currently not the case should put pressure on manufacturers to obtain the necessary approval.

Status of implementation:

As of December 2019, *35%* of our Member's fleet has been installed and/or retrofitted an approved BWTS. It is important to note that there is a considerable increase, comparing with last year's results, on the uptake of BWTS (see Figure 1, below).

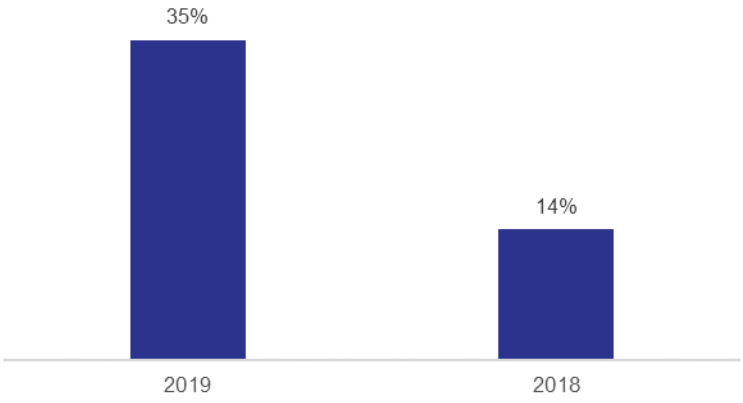

Figure 1 – Percentage of implementation *as of December 2019*

Type of vessels being installed and/or retrofitted with an approved BWTS:

The vast majority of vessels being installed and/or retrofitted with an approved BWTS are container ships (58%), followed by oil tankers (25%) and bulk carriers (10%) (see Figure 2, below).

[3] In accordance with the BWM Convention "installed" in respect of a vessel means the contractual date of delivery of the BWTS to the vessel. In the absence of such a date, the word "installed" means the actual date of delivery of the BWTS to the vessel.

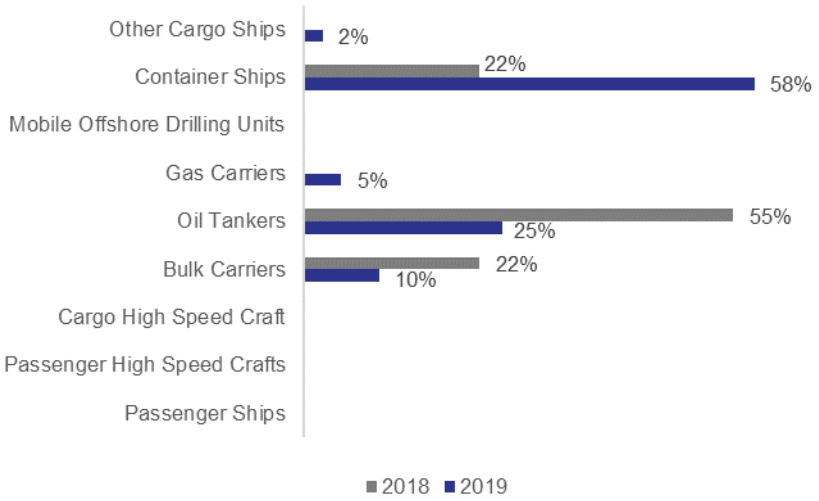

Figure 2 - Type of vessels been installed and/or retrofitted with an approved BWTS *as of December 2019*

Technology used for BWTS:

The majority of BWTS currently been installed and/or retrofitted use filter and UV technology (65%) followed by filter and electrolysis technology (22%) and chemical injection (10%). A small number of ships use only electrolysis (3%). None of the installed and/or retrofitted BWTS use ozone technology (see Figure 3, below).

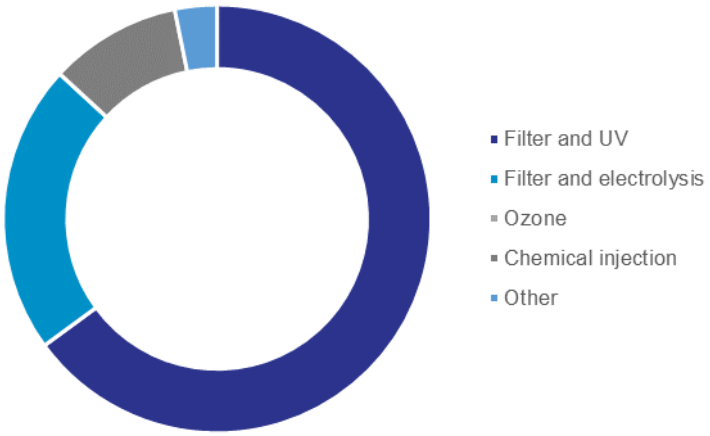

Figure 3 – Technology used for BWTS *as of December 2019*

Approval by the USCG:

The vast majority of installed and/or retrofitted BWTS (88%) have received approval by the US Coast Guard (USCG) (see Figure 4, below).

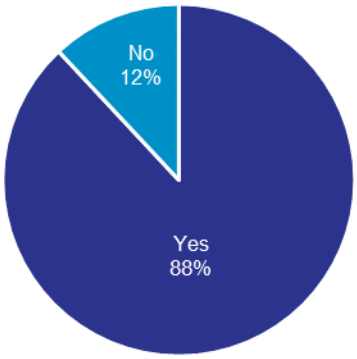

Figure 4 – Approval by the USCG *as of December 2019*

Place that the BWTS has been installed and/or retrofitted on board:

The majority of BWTS (80%) have been installed and/or retrofitted in the engine room whereas the rest on open deck area (15%). A small number of ships (5%) have installed and/or retrofitted a BWTS in other spaces such as the pump room (see Figure 5, below).

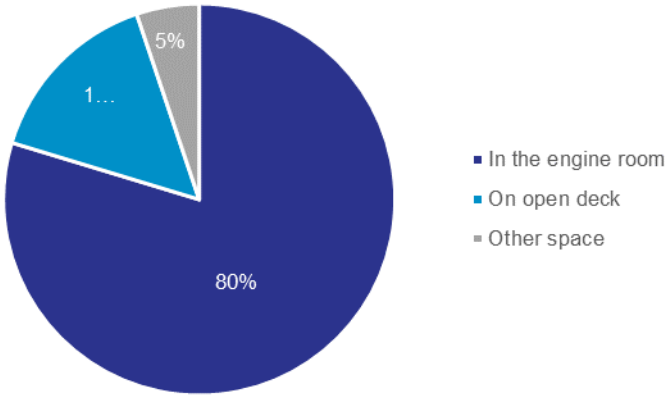

Figure 5 – Place that the BWTS has been installed and/or retrofitted on board *as of December 2019*

Factors that contributed to the selection of BWTS:

The majority of companies indicated that factors other than the ones outlines in the questionnaire have contributed to the selection of BWTS (39%). Among other factors are the shipowner's choice, the delivery time and the ease of operation of the BWTS by the crew. The IMO and USCG type approval (27%) and the treatment technology (21%) are also among the main factors that contributed to the selection of BWTS. Equal factors are the initial cost (6%) and operating cost (6%) of the BWTS (see Figure 6, below).

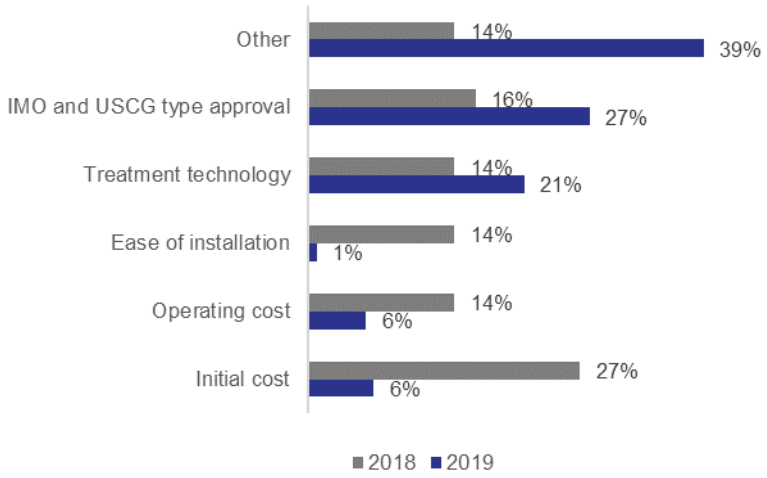

Figure 6 - Factors that contributed to the selection of BWTS *as of December 2019*

Crew training on the use of BWTS:

The majority of the companies (47%) have utilized the manufacturer to train personnel on board on the use and maintenance of the BWTS where as a large number of companies (36%) developed training procedures within the safety management system. Nevertheless, 17% of the companies have utilized other methods (such as simulator in training offices) to train personnel on the use and maintenance of the BWTS (see Figure 7, below).

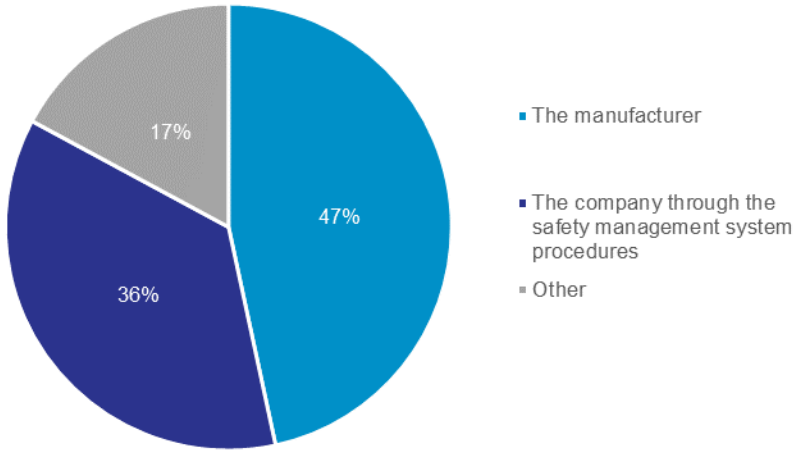

Figure 7 – Crew training on the use of BWTS *as of December 2019*

The BWTS current condition:

The majority of the installed and/or retrofitted BWTS are currently operating normally and used (76%) where as 24% operate problematically. Reasons are outlined below. None of the installed and/or retrofitted BWTS are currently reported inoperative. Comparing with 2018 results, there is an improvement in the current condition of installed and/or retrofitted BWTS (see Figure 8, below).

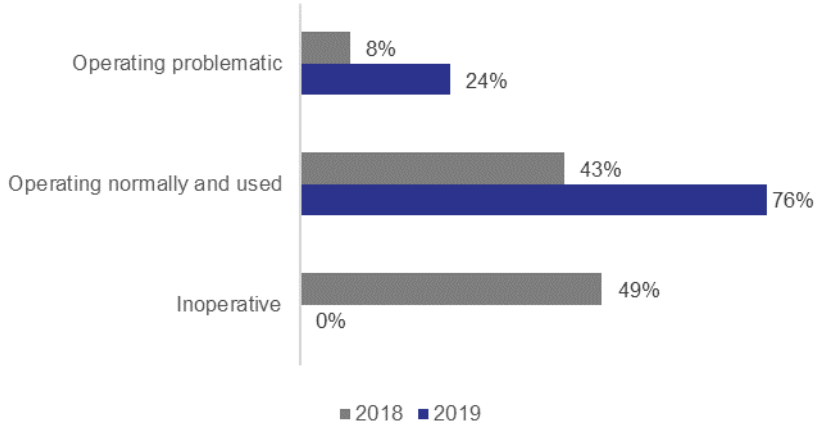

Figure 8 – Current condition of BWTS *as of December 2019*

Issues companies have encountered so far with the use of the approved BWTS:

The majority of companies (56%) have not encounter an issue with the use of BWTS and as such have indicated other factors specifying this observation. A number of companies encounter breakdown of the approved BWTS after installation (24%), spare parts availability and after sales service (12%) as well as the effective training of the crew on the use of the system (9%). Comparing with last year's results a general improvement on the use of approved BWTS has been recorded (see Figure 9, below).

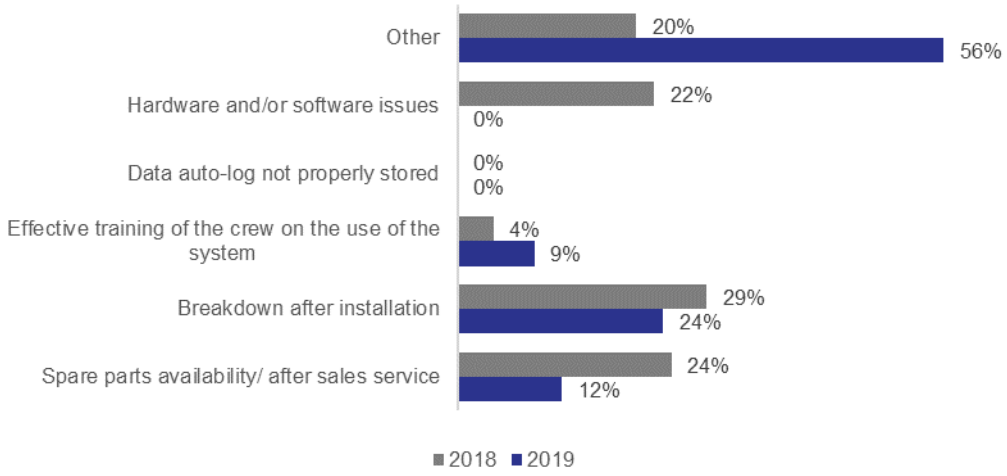

Figure 9 – Issues companies have encountered so far with the use of the approved BWTS *as of December 2019*

Feedback from Classification Societies:

Following a separate questionnaire submitted to Classification Societies, members of the Chamber, issues have been identified associated with the installation and/or retrofitting process as well as the operation of the approved BWTS.

With respect to the installation and/or retrofitting process, Classification Societies have reported bad quality or missing of necessary documentation for approval. In addition, Classification

Societies have observed a misunderstanding or lack of understanding of the requirements for the installation and/or retrofitting of approved BWTS on board vessels. The late start of the retrofitting approval process has also been reported as a major issue. It is important to note that retrofitting approval should start *at least three (3) months* before the installation of the BWTS.

Typical issues identified by Classification Societies during the operation of BWTS is the lack of sufficient training of the crew, inadequate maintenance of the BWTS as well as not sufficient planning of operation according to the limitations of the BWTS and the location.

Any comments or requests for further clarification should be addressed to the undersigned.

With kind regards,

Dimitris Lemesianos
Technical Officer

This is a computer-generated message and therefore unsigned.