Charting the 2020 maritime regulatory landscape

2019 saw the implementation of regulations related to crew, lifesaving, fire safety, environment, cargo, and certification. This year too there will be numerous regulatory changes and for the first time the industry will see a global regulation coming into force that is identified by only the year suffixing the letters IMO, i.e. the highly anticipated 'IMO 2020' sulphur cap. In addition, various other regulations will be implemented globally by the IMO and ILO over the next 12 months.

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This insight provides an overview of some of the important international regulations that enter into force in 2020, including some key domestic regulatory changes in relation to air emissions and ship recycling.

1 JANUARY 2020

Resolution MSC.280(70): Global implementation of the 0.50% sulphur limit for fuel

The sulphur content of any fuel oil used on board ships for propulsion or operation shall not exceed 0.50% on or after 1 January 2020 outside emission control areas, except when the ship has an approved exhaust gas cleaning system (EGCS) installed onboard or uses alternative fuels. This requirement also applies to emergency equipment onboard, such as emergency generators and lifeboats, under MEPC.1/Circ.795/Rev.4 . Links to key IMO circulars on this regulation and sources providing useful information on the sulphur cap are listed below:

• IMO Circulars
Guidelines for consistent implementation of 0.50% sulphur limit - MEPC.320(74)
Guidance on Ship Implementation Plan (SIP) - MEPC.1/Circ.878
Guidelines on port state control – MEPC.321(74)
Guidance for port State control on contingency measures for addressing non-compliant fuel oil – MEPC.1/Circ.881
Guidelines for onboard sampling - MEPC.1/Circ.864/Rev.1
Fuel Oil Non-availability Report (FONAR) template – Appendix 1 of MEPC.320(74)
Delivery of compliant fuel by suppliers - MSC-MEPC.5/Circ.15
Guidance on best practice for fuel oil purchasers/users – MEPC.1/Circ.875
Guidance on best practice for fuel oil suppliers for assuring the quality of fuel – MEPC.1/Circ.875/Add.1
Guidelines for Exhaust Gas Cleaning Systems (EGCS) - MEPC.259(68)
Recommended actions if EGCS fails - MEPC.1/Circ.883

• Other sources
Gard insight 'Prepare crews for PSC spot sampling of ships' fuel'
Gard insight 'Challenges with the use of exhaust gas scrubbers'
ICS guidance on sulphur cap
Guidance on inspections of ships by European Maritime Safety Agency (EMSA)
CIMAC guidelines on stability and compatibility of fuel
Joint industry guidance on the supply and use of 0.50% sulphur marine fuel
FAQs by Classification society DNV-GL

Resolution MSC.402(96): Maintenance of lifeboats, rescue boats, launching appliances and release gear

The requirements in MSC.402(96) relate to the following SOLAS regulations:

• SOLAS regulation III/20 – Operational readiness, maintenance and inspections; and

• SOLAS regulation III/36 – Instructions for on-board maintenance

Weekly and monthly inspections, and routine maintenance can be carried out either by authorized service providers or ships' crew, under the guidance of a senior officer. Annual and five yearly inspections, tests etc., should be conducted by "certified personnel" of either the manufacturer or a service provider having an authorization from the Flag Administration or its recognized organizations. Detailed criteria for the certification of personnel have been provided and the certificate will expire three years from the date of issue. Owners and managers must have health, safety and environment (HSE) procedures in place covering all activities, which their crew and any personnel carrying out maintenance, thorough examinations, operational testing overhaul and repair must comply with.

We also take this opportunity to remind operators of the importance of proper onboard crew training as insufficient onboard procedures and crew competence have been identified as contributing factors in many lifeboat and rescue boat accidents. While crew members that have obtained a formal "Certificate of proficiency in survival craft, rescue boats and fast rescue boats" from recognized training institutions have demonstrated sufficient competence and knowledge to enable them to, in general terms, take charge of a survival craft or rescue boat during and after launch, they may not be properly trained to operate the type of lifeboat and rescue boat carried on board their current ship of employment. Please see our alert 'New IMO procedures for maintenance and inspection of life-saving appliances' for further information.

MARPOL Annex VI: Prohibition on installations containing HCFCs

Under regulation 12 of MARPOL Annex VI, no system/equipment containing hydrochlorofluorocarbons (HCFCs) is permitted to be installed on ships constructed on or after 1 January 2020 and no new installation of the same is permitted on or after that date on existing ships. Existing systems and equipment can continue in service and may be recharged as necessary. Regulations also prohibit the deliberate discharge of ozone depleting substances (ODS) into the atmosphere.

Resolution MSC.403(96) **and** MSC.404(96) **: Foam firefighting appliances for helidecks and helicopter landing area**

A new Chapter 17 has been added to the International Code for Fire Safety Systems (FSS Code) titled 'Helicopter Facility Foam Firefighting Appliances'. It sets out the specifications for foam firefighting appliances for the protection of helidecks and helicopter landing areas. The requirement is that *"for helidecks the foam system shall contain at least two fixed foam monitors or deck integrated foam nozzles, and in addition, at least two hose reels fitted with a foam□making branch pipe and non-collapsible hose sufficient to reach any part of the helideck shall be provided."*

Resolution MSC.404(96): **Means of escape on passenger ships**

Escape routes shall be evaluated by an evacuation analysis early in the design process for ro-ro passenger ships constructed on or after 1 July 2019 and other passenger ships carrying more than 36 passengers and with a date of construction on or after 1 January 2020. The aim of the analysis is to identify and eliminate areas where congestion may develop during an abandonment, due to normal movement of passengers and crew along escape routes.

Resolution MSC.403(96): Water quality of automatic sprinklers

There are two significant amendments to the International Code for Fire Safety Systems (FSS) Code. The first requires protection for parts of the system which may be subjected to freezing temperatures whilst in service and the second states that attention shall be paid to the specification of the water quality provided by the system manufacturer to prevent internal corrosion and clogging.

Resolution MSC.421(98): Definition of vehicle carrier

Regulation II-2/3.56 of SOLAS is replaced by the following wording: "Vehicle carrier means a cargo ship which only carries cargo in ro-ro spaces or vehicle spaces, and which is designed for the carriage of unoccupied motor vehicles without cargo, as cargo." There are also additional requirements for protection of vehicle and ro-ro spaces, and the carriage of motor vehicles with compressed hydrogen or natural gas in their tanks.

Resolution MSC.421(98): Fire integrity of windows on ships carrying not more than 36 passengers

SOLAS II-2/9.4.1.3 has been amended and now requires fire integrity at least equal to ‘A-0’ Class for windows facing survival craft, embarkation and assembly stations, external stairs and open decks used for escape routes, and windows situated below life raft and escape slide embarkation areas.

Resolution MSC.440(99), MSC.441(99), MSC.446(99) and MSC.447(99): Change in format of certificate of fitness for IBC, IGC and BCH code

The certificate of fitness for gas carriers and chemical tankers has an amended format which requires a positive indication that the vessel has been supplied with a loading and stability information booklet in an approved form.

Resolution MSC.453(100): Amendments to the Code of Safety for Special Purpose Ships

Special purpose ships are those which carry on board more than 12 special personnel, such as scientists, expeditionaries, cable-laying personnel etc. Resolutions and amendments contained in MSC.183(79), MSC/Circ.739 and MSC.439(99) have now been assimilated into one resolution forming part of the Special Purpose Ships (SPS) Code. There is now a revised chapter on lifesaving appliances, requirements for special purpose ships to comply with the provisions of SOLAS chapter IV, and a revised Form of Safety Certificate for Special Purpose Ships and Record of Equipment for Special Purpose Ship Safety Certificate.

Resolution MSC.442(99): Amendments to IMDG Code

Amendments 39-18, which were optional from 1 January 2019 are now mandatory. Some of the key changes include an updated section for cargo transport units under temperature control, changes to special provisions list, and updated stowage codes for many substances. Summary of the changes can be found here .

Resolution MSC.436(99) , MSC.438(99) , MSC.439(99) **and** MSC.445(99) : **GMDSS amendments**

At its 99th session, the MSC recognized Iridium as a mobile satellite communication service provider in the Global Maritime Distress and Safety System (GMDSS). Previously INMARSAT was the only approved satellite provider for GMDSS. There is consequently a slight change to the wording used in regulations and radio certificates with the words 'a recognized mobile satellite service' being added.

Resolution MSC.436(99) **: Passenger ship safety**

Safe return to port provisions will apply to existing passenger ships constructed before 1 January 2014 no later than the first renewal survey after 1 January 2025. Ships should be provided with operational information to facilitate the safe return to port following a flooding casualty, there must be an onboard stability computer or access to shore-based support.

Resolution MSC.462(101): **Amendments to the IMSBC Code**

Amendment 05-19 will enter into force on 1 January 2021 but can be implemented voluntarily from 1 January 2020. It contains updates to various schedules, such as a new individual schedule for Bauxite fines as a Group A cargo.

Resolution MSC.421(98): Requirements on subdivision and damage stability **, and water tight hatches**

There are a number of amendments to SOLAS Chapter II-I, including:

• a butterfly valve may be used in the pipe piercing the collision bulkhead instead of a screw-down valve on cargo ships,

• requirement for damage control drills on passenger ships; and

• water tight hatches must be tested in a manner similar to watertight doors.

Resolution MSC.411(97): Fire integrity for wheelhouse windows on gas carriers

A provision requiring at least A-0 fire integrity for wheelhouse windows on ships carrying liquefied gases in bulk has been deleted.

Resolution MSC.409(97): Harmonization of survey periods

There are new requirements to harmonize the survey periods of non-ESP cargo ships, i.e. ships not subject to Enhanced Survey Programme (ESP) code, and ESP ships.

Resolution MSC.409(97): Foam type extinguisher for boiler space

In accordance with amendments to SOLAS II-2/10.5, 135 litre foam type fire extinguisher is not required for a boiler space which has a fixed water-based fire extinguishing system. Members and clients are reminded that if any changes are made to fire extinguishing systems, the fire control plan and fire safety operational booklet/fire training manual should also be amended correspondingly.

Resolution MSC.409(97): Code on Noise Levels onboard Ships

There is a minor amendment to the code whereby the words “but before 1 January 2015” have been deleted, to address a discrepancy in the application of the Code on Noise Levels on Board Ships.

Resolution MSC.425(98): Winch brake testing of launching and embarkation appliances

To clarify the load and factor of safety to be applied to winches, its structural components and winch brakes, section 6.1 of the International Life-Saving Appliance (LSA) Code has been amended.

Resolution MSC.449(99): Performance standards for Shipborne Indian Regional Navigation Satellite System (IRNSS)

IRNSS is a regional navigation satellite system developed and operated by India, which is compatible with other navigation satellite systems worldwide. Resolution MSC.449(99) sets out the performance standards for IRNSS receiver equipment. It must include the following minimum facilities:

• antenna capable of receiving IRNSS signals;

• IRNSS receiver and processor;

• means of accessing the computed latitude/longitude position;

• data control and interface; and

• position display and, if required, other forms of output.

Domestic legislation: O.1% Sulphur limit in China

The sulphur content of fuel oil used on board sea-going vessels should not exceed 0.1% when operating in inland river control area. The inland river control area is the navigable waters of the main stream of the Yangtze River (from Shuifu, Yunnan to the mouth of the Liuhe River, Jiangsu) and the main stream of the Xijiang River (from Nanning, Guangxi to Zhaoqing, Guangdong). Our Alert on Chinese ECAs can be found here and an update from our correspondent summarizing China MSA’s implementation scheme can be found here .

Domestic legislation: California’s at-berth emission requirements

California's At-Berth Ocean-Going Vessels Regulation requires a fleet operator to reduce at-berth emissions from its vessels' auxiliary engines at each California Port by 80% from 1 January 2020. This follows the 70% reduction target set in January 2017. The At-Berth Regulation applies only to certain types of vessels and only when these vessels are frequent visitors to Californian ports. Fleets of container and refrigerated-cargo vessel whose vessels cumulatively make twenty-five (25) or more visits annually to one port are covered by the Regulations. The same are fleets of passenger vessels whose vessels cumulatively make five (5) or more visits annually to one port. A 'fleet' is defined as all owned and chartered ships of one vessel type that are under the direct control of the same company. Gard alert on this topic can be found here .

1 MARCH 2020

Resolution MSC.305(73): Carriage ban on non-compliant fuel for ships not fitted with EGCS

Ships which do not have an exhaust gas treatment system (EGCS) installed, i.e. scrubber, are prohibited from carrying fuel oil with a sulphur content

higher than 0.50% on board after 1 March 2020. If any high sulphur fuel has not been consumed before 1 January 2020, it must be disposed of at a reception facility by this date. If any non-compliant fuel remains onboard after 1 March 2020, the Flag State and Port State must be consulted. It is worth mentioning that the new IAPP certificates stating if the ships have a scrubber installed or has chosen to use compliant fuel, should be issued no later than the first IAPP periodical survey after 1 March 2020. The requirement of MSC.305(73) does not change in any way the entry into force date of the 0.50% limit from 1 January 2020 for fuel used onboard for propulsion or operation.

31 MARCH 2020

Resolution MSC.278(70): IMO Data Collection System **(DCS)**

The first reporting period for the IMO DCS started on 1 January 2019 and the report on fuel oil consumption for this reporting period should be submitted to Flag State or Recognized Organization no later than 31 March 2020. Vessels will be issued with a statement of compliance by the classification societies after verification of data but no later than **31 May 2020** . This statement of compliance should be kept onboard during the period of its validity, i.e. the calendar year in which it is issued and the first five months of the subsequent calendar year.

1 OCTOBER 2020

Resolution MEPC.312(74) **,** MEPC.314(74) **,** MEPC.316(74) **, and** MEPC.317(74) **: Use of electronic record books**

As alternative to hard copy record books, the IMO's MEPC'74 adopted amendments regarding the use of electronic record books (ERB). The IMO hopes this will help reduce the heavy burden associated with paperwork and contribute to environmental initiatives. The IMO also foresees benefits when it comes to the retention of records by companies, crew and officers. The IMO guidelines only apply

to the use of electronic record books on board to meet the requirements of the following record books:

• Oil Record Book, parts I and II (MARPOL Annex I, regulations 17.1 and 36.1);

• Cargo Record Book (MARPOL Annex II, regulation 15.1);

• Garbage Record Book, parts I and II (MARPOL Annex V, regulation 10.3);

• Ozone-depleting Substances Record Book (MARPOL Annex VI, regulation 12.6);

• Recording of the tier and on/off status of marine diesel engines (MARPOL Annex VI, regulation 13.5.3);

• Record of Fuel Oil Changeover (MARPOL Annex VI, regulation 14.6); and

• Record Book of Engine Parameters (NOX Technical Code, paragraph 6.2.2.7).

An important requirement is that any electronic record book should be provided with written confirmation by the Flag State and it should be carried onboard for the purpose of regulatory surveys or inspections. With regards to PSC inspections of electronic records, MEPC.312(74) states that *"It is recommended that if a ship cannot produce the electronic record book or a declaration provided by the Administration during the PSC inspection, the PSC officer should request to view an alternative verified copy of the records or a hard copy record book for verification"* .

Resolution MEPC.313(74) and MEPC.317(74) : Amendments to NOx technical code 2008

There are two NOx certification schemes for diesel engines fitted with selective catalytic reduction (SCR), which are:

• Scheme A: where the SCR and the engine are tested together, i.e. combined testing

• Scheme B: they are certified separately before installation

Currently, Scheme B can only be used where the Flag Administration deems that Scheme A is not appropriate. Under the new amendments, the Administration's approval is not needed when applying for Scheme B.

28 OCTOBER 2020

Resolution MEPC.300(72): Ballast water management system (BWMS)

Ballast Water Management systems installed on or after 28 October 2020 must be approved in accordance with the IMO Code for Approval of Ballast Water Management Systems (BWMS Code) , whereas systems installed before 28 October 2020 must be approved either in accordance with BWMS Code or the 2016 G8 guidelines adopted by MEPC.279(70) or the G8 guidelines adopted by MEPC.174(58) . Our Gard Alert highlighting the timeline for the implementation of the Ballast Water

irrespective of whether it is sourced from Gard AS, its shareholders, correspondents, or other contributors.

Management Convention (BWMC) can be found
here. Owners and managers can also refer to FAQs prepared by the IMO and ICS for further clarification on BWMC.

26 DECEMBER 2020

MLC 2006: 2018 amendments to the Code of the Maritime Labour Convention

Standards A2.1 and A2.2 have been amended and now oblige shipowners to pay wages and other entitlements to seafarers where the seafarer is held captive on or off the ship as a result of acts of piracy or armed robbery against ships. In other words, a seafarer's employment agreement will continue to have effect while a seafarer is held captive notwithstanding the passing of the expiry date.

31 DECEMBER 2020

EU legislation on ship recycling (SRR): Inventory of hazardous materials **(IHM)**

All non-EU and existing EU vessels calling at a port or anchorage of an EU member state must have an IHM. EU registered vessels must have an inventory certificate (IC) or a ready for recycling certificate, whereas for non-EU vessels initial control is limited to a statement of compliance (SOC). These documents may be checked by inspectors during port state control inspections. Owners and managers should note that the EU legislation has some additional requirements for the Inventory compared with the IMO's Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships (HKC).