

# The European Port Strategy in the field of safety and security and its impact in the energy transition process\*

by Christina Zournatzi

1. Introductory remarks. - 2. International Conventions, Codes and Guidelines promoting maritime safety in Ports. - 3. EU's strategy on safety and security. - 4. The new EU provisions on ship-source pollution and on the investigation of accidents in the maritime transport sector.

**1. - Introductory remarks.** The European Parliament on its Resolution for a comprehensive European Port Strategy besides the guidelines on the digitalization in ports and logistics and on the reduction of GHG emissions is taking action also in the field of safety and security. With the adoption of four directives by the Council in November 2024 and with the revision of the Regulation establishing the European Maritime Safety Agency is actively committed in areas like maritime safety, pollution prevention, digitalization and decarbonization.

To this purpose the European Commission, with the assistance of the European Maritime Safety Agency (EMSA) and in cooperation with the Member States, put in place a reinforced system of prevention which will contribute to avoid accidents or illegal activities from happening and ultimately shall contribute to prevent the loss of human life and the environmental pollution.

The revised legislative framework aims to harmonize the EU legislation with the international policies and guidelines set by the IMO, the International Labour Organization or the Paris Memorandum of Understanding on Port State control signed on 26 January 1982 (the 'Paris MoU') as it places greater emphasis on pollution prevention performance, and compliance with international and national environmental regulations.

The European Commission on 1 June 2023 with a Communication<sup>1</sup> called *Maritime safety: at the heart of clean and modern shipping* intended to amend the legal structure on maritime safety and sustainability with the review of all the relevant legislation. Significant amendments have been introduced relating to:

a) Directive (EU) 2024/3100<sup>2</sup> of the European Parliament and of the Council of 27 November 2024 amending Directive 2009/21/EC on flag State requirements. The Directive aims to enhance safety and to prevent pollution from ships flying the flag of a Member State and applies to the administration of such Member State in respect of ships engaged in international voyages. It introduces an improved framework of ships' inspections and an advanced monitoring of their performance, ensuring ships meet safety and operational standards. Furthermore, it requires competency-related training aimed at ensuring that the personnel responsible for performing surveys, flag State inspections, and verifications of ships and companies meet specific standards;

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<sup>1</sup> Communication from the Commission to the European Parliament, the Council, the European Economic Committee of the regions, *Maritime safety: at the heart of clean and modern shipping* (01.06.2023).

<sup>2</sup> On 1 June 2023, the Commission adopted a proposal for a directive amending Directive 2009/21/EC and the final act Directive (EU) 2024/3100 of the European Parliament and of the Council of 27 November 2024 amending Directive 2009/21/EC on compliance with flag State requirements, *OJ L, 2024/3100, 16.12.2024*. was adopted.

b) Directive (EU) 2024/3099<sup>3</sup> of the European Parliament and of the Council of 27 November 2024 amending Directive 2009/16/EC on Port State control. The Directive sets out rules on the system for Port State control inspections in order to verify whether the crew certifications and the maintenance of the ship's equipment and system comply with the requirements of international conventions on the safety of life at sea, on the protection of the marine environment and on living and working conditions on ships of all flags;

c) Directive (EU) 2024/3017<sup>4</sup> of the European Parliament and of the Council of 27 November 2024 amending Directive 2009/18/EC establishing the fundamental principles governing the investigation of accidents in the maritime transport sector;

d) Directive (EU) 2024/3101<sup>5</sup> of the European Parliament and of the Council of 27 November 2024 amending Directive 2005/35/EC as regards ship-source pollution and on the introduction of administrative penalties for infringements<sup>6</sup>. The Directive incorporates the international standards and introduces sanctions and recovery measures for infringement on ship-source pollution in order to improve maritime safety and to enhance protection of the marine environment<sup>7</sup>. In order to achieve that, it imposes administrative sanctions to any company or other legal entity, or physical person is proved to be liable for illegal discharges of polluting substances. However, nothing prevents Member States from implementing stricter regulations aligned with EU and international legal standards, in compliance with their national law. The European Union's maritime practices follow established international rules and agreements and are consistent with international conventions, codes and resolutions while upholding the rights of navigation as enshrined in UNCLOS<sup>8</sup>.

These four directives were adopted by the Council in November 2024 whilst e) Regulation (EC) No 1406/2002 establishing the European Maritime Safety Agency is currently under revision in areas such as maritime safety, pollution prevention, digitalization and decarbonization.

European Parliament on its Resolution of 17 January 2024 concerning the development of a comprehensive European Port Strategy<sup>9</sup> underlines the crucial role, the UE Green Deal preserves to ports in the energy transition process, as they are vital for achieving the EU's climate objectives acting as nodes in transport systems supporting decarbonization of waterborne transport<sup>10</sup>. With its Resolution the Euro-

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<sup>3</sup> Directive (EU) 2024/3099 of the European Parliament and of the Council of 27 November 2024 amending Directive 2009/16/EC on Port State control, OJ L, 2024/3099, 16 December 2024.

<sup>4</sup> Directive (EU) 2024/3017 of the European Parliament and of the Council of 27 November 2024 amending Directive 2009/18/EC of the European Parliament and of the Council establishing the fundamental principles governing the investigation of accidents in the maritime transport sector and repealing Commission Regulation (EU) No 1286/2011, OJ L, 2024/3017, 6 December 2024.

<sup>5</sup> Directive (EU) 2024/3101 of the European Parliament and of the Council of 27 November 2024 amending Directive 2005/35/EC as regards ship-source pollution and on the introduction of administrative penalties for infringements, OJ L, 2024/3101, 16 December 2024.

<sup>6</sup> Directive (EU) 2024/3101 of the European Parliament and of the Council of 27 November 2024 amending Directive 2005/35/EC as regards ship-source pollution and on the introduction of administrative penalties for infringements, OJ L, 2024/3101, 16 December 2024

<sup>7</sup> Article 1, Directive (EU) 2024/3101.

<sup>8</sup> United Nations Convention on the Law of the Sea, Montego Bay, 10 December 1982.

<sup>9</sup> See European Parliament resolution of 17 January 2024 on building a comprehensive European Port Strategy [2023/2059(INI)].

<sup>10</sup> For further reading see: S. ZUNARELLI - M.M. COMENALE PINTO, *Manuale di Diritto della navigazione e dei trasporti*, V ed., Milano, 2023.; J.M. MARTÍN OSANTE, *Incidencia de la digitalización en los seguros de transporte*, in *Revista Española de Seguros*, n. 189/190, 2022, 119 ss.

pean Parliament put in place legislation adopting incentives and financial support schemes for the increased<sup>11</sup>, need of investment in renewable sources, and for the development of transport infrastructures. In order to give financial assistance to Member States for the development of critical infrastructures for the role they play in the energy transition as nodes in the multimodal transport, such as in ports and terminals, the European Union has adopted<sup>12</sup> Regulation (EU) 2021/1056, in force since 1 July 2021, establishing the Just Transition Fund (JTF). The JTF which assists regions and people to address the social, employment, economic and environmental impacts of the transition, including decarbonization of the local transport sector and its infrastructure is in line with the principles and the strategic objectives established with the Fund Package set up by Regulation (EU) 2021/1060<sup>13</sup>. Investments in sustainable maritime infrastructures are covered as well by Regulation (EU) 2021/523, establishing the InvestEU Programme<sup>14</sup> which prioritizes areas with needs of additional investment. InvestEU Programme works in synergy with other relevant Union programs in areas such as transport, energy and digitization and contributes to Union policies through the development of projects and enterprises also in the blue economy with investments in the area of maritime entrepreneurship and industry for an innovative and competitive maritime industry and for the deployment of renewable marine energy<sup>15</sup>.

**2. - EU's strategy on safety and security.** The EU is currently taking action by implementing the comprehensive EU Ports Strategy to address challenges in the field of digitalization in ports and logistics and on the reduction of GHG emission with considerable investments in renewable sources and innovative technologies. The Maritime Safety package is acting on the ground of safety and security and aims to review the legal framework with the introduction of new pieces of legislation to support safe and clean shipping, reducing at the same time the overall transport's impact on the marine environment. This reinforced system of prevention aims to enhance safety and prevent pollution from ships in compliance with all applicable international regulations.

The European Union in line with its policy in achieving EU's climate objectives established by the Paris Agreement aims to reduce the overall negative impacts of shipping on the marine environment, with a focus on both safety and security aspects as part of this comprehensive approach<sup>16</sup>.

Directive (EU) 2024/3100 on flag State requirements aims to enhance safety and to prevent pollution from ships flying the flag of a Member State (Article 1, para 1) and applies to the administration of such

<sup>11</sup> European Parliament resolution of 17 January 2024 on building a comprehensive European Port Strategy [2023/2059(INI)] states that by 2030, the EU aims to import 10 million tons of green hydrogen and for that purpose a comprehensive strategy on importation, coordination, and infrastructure development should be established promptly as it is essential for the Port Strategy.

<sup>12</sup> Regulation (EU) 2021/1056 of the European Parliament and of the Council of 24 June 2021 establishing the Just Transition Fund, OJ L 231, 30 June 2021, 1-20.

<sup>13</sup> Regulation (EU) 2021/1060 of the European Parliament and of the Council of 24 June 2021 laying down common provisions on the European Regional Development Fund, the European Social Fund Plus, the Cohesion Fund, the Just Transition Fund and the European Maritime, Fisheries and Aquaculture Fund and financial rules for those and for the Asylum, Migration and Integration Fund, the Internal Security Fund and the Instrument for Financial Support for Border Management and Visa Policy, OJ L 231, 30 June 2021, 159-706.

<sup>14</sup> Regulation (EU) 2021/523 of the European Parliament and of the Council of 24 March 2021, establishing the InvestEU Programme and amending Regulation (EU) 2015/1017, OJ L 107, 26 March 2021, 30-89.

<sup>15</sup> P.L. SANCHEZ-GONZALEZ - D. DIAZ-GUTIÉRREZ - T.J. LEO - L.R. NÚÑEZ-RIVAS, *Toward Digitalization of Maritime Transport?*, in *Sensors*, vol. 19(4), 2019, 926; T. HOCKSELL, *Regulatory Approaches to Carbon Dioxide Usage and Storage in the European Union*, in *Carbon and Climate Law Review*, vol. 2, 2023, 76-86.

<sup>16</sup> See EMSA (European Maritime Safety Agency) on <https://www.emsa.europa.eu/reducing-emissions/fuel-eu-maritime-regulation.html#:~:text=The%20Fuel%20EU%20Maritime%20Regulation,Directive%202009/16/EC> and IMO's work to cut GHG emissions from ships on <https://www.imo.org/en/mediacentre/hottopics/pages/cutting-ghg-emissions.aspx>.

Member State in respect of ships engaged in international voyages (Article 2). Introduces an improved framework of ships' inspections and an advanced monitoring of their performance. In addition, introduces the use of the database for assessing a ship's seaworthiness and compliance with regulations before it can operate, ensuring it meets safety and operational standards.

The flag State must ensure that the ship flying its flag holds all required certifications in compliance with all applicable international regulations. According to Art. 4a of Directive (EU) 2024/3100 with regard to international shipping, Member States should apply the mandatory flag State-related provisions and take all necessary measures to ensure full adherence to international norms and standards under the Conventions by ships entitled to fly their flag. They should ensure that every ship is inspected at least once every five years and that in case corrective measures are needed, these should be guaranteed and rectified within an appropriate timeframe, to be determined by the flag State.

Furthermore, Directive (EU) 2024/3100 in Art. 4c requires competency-related training to ensure that the personnel responsible for performing surveys, flag State inspections, and verifications of ships and companies meet specific standards. To this purpose the European Commission, with the assistance of the European Maritime Safety Agency (EMSA) and the cooperation with Member States, shall organize, relevant training activities for flag State inspectors and flag State surveyors.

Likewise, a secondary safety system should be offered by Port State control officers with inspections of foreign-flagged ships in port to ensure they meet international maritime regulations. This reinforced system of prevention will contribute to avoiding accidents or illegal activities from happening and ultimately to prevent the loss of human life and environmental pollution.

The Directive (EU) 2024/3099 on Port State control was adopted on 27 November 2024 as part of the EU maritime safety package. It sets out rules on the system for Port State control inspections in order to verify whether the crew certifications and the maintenance of the ship's equipment and system comply with the requirements of international conventions on the safety of life at sea, on the protection of the marine environment and on living and working conditions on ships of all flags.

In the revised Directive the system for prioritizing which ships to inspect is also being enhanced. Inspections should be carried out by at least two Port State control inspectors, and any reason (such as unexpected or overriding factors, or objective reasons like limited staff or accessibility problems) for not conducting the inspection must be duly recorded.

Moreover, Directive places greater emphasis to pollution prevention performance, and compliance with environmental regulations. These terms highlight how a ship's operational practices, maintenance, and adherence to environmental standards<sup>17</sup> influence its overall risk assessment.

Since Port State control imposes new inspection requirements, determined by the new EU provisions or by international practices and standards, there is therefore a need to ensure the development of the training of Port State control officers. That will allow Port State control authorities, regarding port calls by ships, to ensure they meet international safety and security standards on maritime safety and security, on protection of the marine environment and on living and working conditions on-board.

Another aspect in which Directive pays attention is the digitalization and the technological progress in the area of data collection and communication, with the aim of cost reduction and enhancing workforce productivity. Also, Port State control should make greater use of electronic certificates<sup>18</sup>, which are planning to increase in the coming years allowing more efficient inspections.

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<sup>17</sup> See Article 9 (c) of Directive (EU) 2024/3099: Environmental parameters shall be based on the number of deficiencies relating to Marpol 73/78, AFS 2001, the BWM Convention, CLC 92, the Bunkers Convention, 2001, the Nairobi Convention and the Hong Kong Convention in accordance with Annex I, Part I.3, and Annex II.

<sup>18</sup> See Article 24a of Directive (EU) 2024/3099: The Commission shall, in close cooperation with the Member States, adopt implementing acts laying down the functional and technical specifications for a validation tool for electronic statutory certificates. Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 31(2).



The directive's scope is also modified with regard to fishing vessels<sup>19</sup> of above 24 meters in length in a way that can be inspected from the Port State control of Member States that wish to carry out these inspections<sup>20</sup>. It is provided that a separate module for the existing inspection database should be developed<sup>21</sup> and the Commission, in cooperation with the State signatories to the Paris MoU, may adopt guidelines establishing the detailed arrangements for such a parallel and separate specific Port State control regime for those fishing vessels.

A report on the implementation of the Directive should be submitted every five years with the first to take place by 6 July 2032 subject to further amendments based on the outcomes of the report<sup>22</sup>.

**3. - International Conventions, Codes and Guidelines promoting maritime safety in Ports.** The IMO is the key intergovernmental body responsible for creating and maintaining global maritime regulations, including the safety and environmental standards set out in relevant annexes of the International Convention for the Safety of Life at Sea (SOLAS 74) and the International Convention for the Prevention of Pollution from Ships (Marpol 73/78)<sup>23</sup>. Mechanisms and procedures able to improve maritime safety include technologies for tracking vessels, contingency plans for pollution incidents, and collaboration between nations to share information and resources.

To this purpose IMO has established Mandatory Ship Reporting (MSR) systems which are communication and tracking systems designed to assist the communication and sharing of vital information related to ship movements and cargo, ensuring that relevant authorities are promptly informed.

Furthermore, IMO has developed an international policy document, the Resolution A.857(20)<sup>24</sup>, with which invited Governments to take account of the annexed Guidelines when developing, implementing and operating vessel traffic services and recommended Governments to encourage masters of ships navigating in areas for which vessel traffic services (VTS) are provided to make use of such services. These

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<sup>19</sup> See International Agreements and Conventions in fisheries: the Cape Town Agreement of 2012 on the Implementation of the Provisions of the 1993 Protocol relating to the Torremolinos International Convention for the Safety of Fishing Vessels, 1977 (the 'Cape Town Agreement'), the International Labour Organization Convention 188 on Work in Fishing of 2007 and the International Convention on Standards of Training, Certification and Watchkeeping for Fishing Vessel Personnel of 1995 (STCW-F).

<sup>20</sup> Article 3, para 4 of Directive (EU) 2024/3099 states: Fishing vessels of less than 24 meters in length, warships, naval auxiliaries, wooden ships of a primitive build, government ships used for non-commercial purposes and pleasure yachts not engaged in trade shall be excluded from the scope of this Directive. For the purposes of this Directive, a fishing vessel's length shall be determined in accordance with the Cape Town Agreement of 2012 on the Implementation of the Provisions of the 1993 Protocol relating to the Torremolinos International Convention for the Safety of Fishing Vessels, 1977.

<sup>21</sup> Article 3 (b) is inserted of Directive (EU) 2024/3099.

<sup>22</sup> Article 35, Directive (EU) 2024/3099 of the European Parliament and of the Council of 27 November 2024 amending Directive 2009/16/EC on port State control.

<sup>23</sup> However, Article 56(2) of UNCLOS gives power to coastal States to regulate foreign ships at sea, giving them jurisdiction in the EEZ with regard to 'the protection and preservation of the marine environment'. Also, Article 220 of UNCLOS provides that coastal States have some powers of enforcement over foreign ships in their EEZ that fail to comply with IMO Conventions' regulations with regard to ship-source pollution of the marine environment.

<sup>24</sup> IMO Twentieth assembly resolutions and other decisions, Resolution 839-873, 17-27 November 1997, London, 1998, 117. In 1997 the International Maritime Organization (IMO) Resolution A.857 (20), Guidelines for Vessel Traffic Services; Annex 1, Guidelines and Criteria for VTS; and Annex 2, Guidelines on Recruitment, Qualifications and Training for VTS Operators was adopted. The guidelines that are associated with SOLAS V Regulation 12, describe the principles and general operational provisions for the operation of a VTS and participating vessels.

Guidelines are associated with SOLAS<sup>25</sup> Regulation 8-2 *Chapter V (Safety of Navigation)*<sup>26</sup> and together outline the legal framework in the context of VTS as they describe the principles and general operational provisions for vessel traffic services and participating vessels. SOLAS Chapter V in the Regulation gives to coastal States the power to decide if and where VTSs centers can operate and describes the legal and organizational structure of such services.

At European level national reporting systems connected to the Union Maritime Information and Exchange system, SafeSeaNet transmit vital information related to ship movements and cargo, promptly notifying the relevant authorities. More precisely, Art. 5 of Directive 2002/59/EC<sup>27</sup> establishes a Community vessel traffic monitoring and information system whilst Article 16 provides that ships which fail to notify in accordance with international or EU rules, are considered to be posing a potential hazard to shipping or a threat to maritime safety, the safety of individuals or the environment.

**4. - The new EU provisions on ship-source pollution and the investigation of accidents in the maritime transport sector.** Directive (EU) 2024/3101<sup>28</sup> of the European Parliament and of the Council of 27 November 2024 incorporates international standards and introduces sanctions and recovery measures for infringement on ship-source pollution in order to improve maritime safety and to enhance protection of the marine environment<sup>29</sup>. To achieve that, it imposes administrative penalties to any company or other legal entity or physical person is proved to be liable for illegal discharges of polluting substances.

However, nothing prevents Member States from implementing stricter regulations aligned with EU and international legal standards, in accordance with their national law<sup>30</sup>.

The administrative penalties<sup>31</sup> are inflicted to the company of the ship or to any other legal entity or physical person who has assumed the assignment of the operations of the ship from the ship owner in accordance with what stated in the International Management Code for the Safe Operation of Ships and for Pollution Prevention (ISM Code)<sup>32</sup>. The ISM Code has been incorporated into Union law through

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<sup>25</sup> SOLAS chapter V - Safety of Navigation, identifies certain navigation safety services that should be provided by Contracting Governments and sets forth provisions of an operational nature applicable in general to all ships on all voyages. This contrasts with the Convention as a whole, which only applies to certain classes of ship engaged on international voyages; SOLAS chapter V - Regulation 12 - VTS, which came into force in July 2002, contains five paragraphs. These are at Annex B. Besides Conventions, IMO has also issued a series of Resolutions and Codes, including guidelines on navigation issues and performance standards for ship borne navigational and radio communications equipment. Some are simply Recommendations - though such is their wide acceptance that they effectively mark international policy - while others are referred to by relevant Regulations of specific Conventions, thereby giving them the same weight as the Convention Regulations themselves.

<sup>26</sup> IMO, IMO and the safety of navigation, Vessel Traffic services, in Focus on IMO 1998, 9 ss; IMO, SOLAS, International Convention for the Safety of Life at Sea, 1974, 1997/1998 amendments, London, 1999, 8.

<sup>27</sup> Directive 2002/59/EC of the European Parliament and of the Council of 27 June 2002 establishing a Community vessel traffic monitoring and information system and repealing Council Directive 93/75/EEC.

<sup>28</sup> Directive (EU) 2024/3101 of the European Parliament and of the Council of 27 November 2024 amending Directive 2005/35/EC as regards ship-source pollution and on the introduction of administrative penalties for infringements, OJ L, 2024/3101, 16 December 2024.

<sup>29</sup> Article 1, Directive (EU) 2024/3101.

<sup>30</sup> Directive (EU) 2024/3101, n. (11), states that Member States in the imposition of penalties should take into account the principles of the Charter of Fundamental Rights of the European Union, including the principle of 'ne bis in idem' and the 'polluter pays principle', when applicable.

<sup>31</sup> For criminal penalties, the obligations of the Member States are set out in Directive (EU) 2024/1203.

<sup>32</sup> International Management Code for the Safe Operation of Ships and for Pollution Prevention adopted by the International Maritime Organization by Assembly Resolution A.741(18) of 4 November 1993, as amended.

Regulation (EC) No 336/2006 of the European Parliament and of the Council<sup>33</sup>.

Irregularities could also arise and therefore be verified from a Port State control inspection or following information related to potential illegal discharges of the ship as foreseen in the relevant European provisions<sup>34</sup> or following information associated to an infringement of Marpol 73/78<sup>35</sup>. The International Convention on the Prevention of Pollution from Ships (Marpol 73/78) of the International Maritime Organization (IMO) besides the provisions on general prohibitions of discharges from ships at sea, it specifies the precise conditions under which, exceptionally, certain substances can be discharged into the marine environment. Other Member States with an interest in assisting the timely-cross border cooperation effectively and to minimize potential encumbrances on enforcement actions should have access to that information.

To assist Member States to effectively enforce the aforementioned legislative provisions is provided training relating to methods and practices for evidence collection together with guidance on relevant regulatory developments of Marpol 73/78 and on technological advancement available. Furthermore, are considered other relevant legislative provisions<sup>36</sup>, on marine pollution, resulting in harm to biodiversity and marine ecosystems, to human health and to other marine activities, such as fishing, tourism and recreation in coastal areas.

The European Union's maritime practices follow established international rules and agreements and are consistent with international conventions, codes and resolutions while upholding the rights of navigation as enshrined in UNCLOS<sup>37</sup>.

Regarding the investigation of accidents in the maritime transport sector, Directive (EU) 2024/3017<sup>38</sup> of the European Parliament and of the Council of 27 November 2024 amending Directive 2009/18/EC establishes the fundamental principles governing the investigation of accidents in the maritime transport sector and provides for a system of marine safety investigations. The objectives of this Directive are namely to rule on the safety investigation in order to improve maritime safety and protect the marine environment.

According to Article 5 the safety investigation authority shall carry out an investigation after any very serious marine casualty that involves a ship flying its flag; or it takes place within its territorial sea and internal waters as defined in UNCLOS; or it involves a significant interest of the Member State. If the marine casualty or incident occurs in other waters, and involves a ro-ro passenger ship or high-speed passenger craft the safety investigation procedure shall be launched by the last Member State visited by

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<sup>33</sup> Regulation (EC) No 336/2006 of the European Parliament and of the Council of 15 February 2006 on the implementation of the International Safety Management Code within the Community and repealing Council Regulation (EC) No 3051/95.

<sup>34</sup> Directive 2002/59/EC of the European Parliament and of the Council Directive 2002/59/EC of the European Parliament and of the Council of 27 June 2002 establishing a Community vessel traffic monitoring and information system and repealing Council Directive 93/75/EEC.

<sup>35</sup> Art. 2 (Definitions) states that for the purposes of Directive (EU) 2024/3101, "Marpol 73/78" means *the International Convention for the Prevention of Pollution from Ships, 1973, including its 1978 and 1997 Protocols, in its up-to-date version*.

<sup>36</sup> Directives 2008/56/EC of the European Parliament and of the Council of 17 June 2008 establishing a framework for community action in the field of marine environmental policy (Marine Strategy Framework Directive), OJ L 164, 25 June 2008, 19-40, Directive (EU) 2016/802 of the European Parliament and of the Council of 11 May 2016 relating to a reduction in the sulphur content of certain liquid fuels (codification), OJ L 132, 21 May 2016, 58-78 and Directive (EU) 2024/2881 of the European Parliament and of the Council of 23 October 2024 on ambient air quality and cleaner air for Europe (recast), OJ L, 2024/2881, 20 November 2024.

<sup>37</sup> See United Nations Convention on the Law of the Sea, Montego Bay, 10 December 1982.

<sup>38</sup> Directive (EU) 2024/3017 of the European Parliament and of the Council of 27 November 2024 amending Directive 2009/18/EC of the European Parliament and of the Council establishing the fundamental principles governing the investigation of accidents in the maritime transport sector and repealing Commission Regulation (EU) No 1286/2011, OJ L, 2024/3017, 6 December 2024.

that ship or craft and shall remain responsible for the safety investigation unless it is agreed to proceed differently with other interested Member State [Article 7 (6) (c)]. For the investigation the IMO Guidelines<sup>39</sup> to Assist Investigators in the Implementation of the Casualty Investigation Code<sup>40</sup> are followed and should be activated right after the occurrence of the marine casualty or incident, and, in any event, no later than two months thereafter.

Safety investigation authorities should conduct their work with impartiality and independence in its organization and legal structure and with all the necessary powers and financial resources suitable to comply with their obligation under Directive (EU) 2024/3017 (Article 8). The investigations shall result in a published accident report or just a concise report in the case that is not concerned a very serious marine casualty<sup>41</sup>. Member States should guarantee that the recommendations made by the safety investigation authorities are observed with the aim of preventing future accidents in accordance with Union and International law [Article 14 (12) 1].

The Directive in the broader context of safety investigation has assigned importance to the working and living conditions on board given the impact of human factors in the occurrence of marine casualties and incidents. To this aim, Directive (EU) 2024/3017 provides that, in cooperation with the European Maritime Safety Agency, Member States' safety investigation authorities shall offer training on specific methods and new technologies as well as on digital tools and equipment<sup>42</sup>. To improve safety aboard vessels and to ensure the health and safety of the people working on them, training includes information to improve capabilities and performance on the deployment of renewable and sustainable fuels in the light of the EU's climate objectives<sup>43</sup>.

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<sup>39</sup> According to Article 3 (Definitions) of Directive (EU) 2024/3017 "IMO Guidelines to Assist Investigators in the Implementation of the Casualty Investigation Code" means the guidelines in the Annex to IMO resolution A.1075(28) adopted by the IMO Assembly on 4 December 2013, in their up-to-date version.

<sup>40</sup> Article 5 of Directive (EU) 2024/3017 on obligation to investigate.

<sup>41</sup> Article 14 (Accidents reports) of Directive (EU) 2024/3017.

<sup>42</sup> Article 17 (a) of Directive (EU) 2024/3017 on training and operational support.

<sup>43</sup> For an extensive reading on sustainable fuels in transport sector see: H.K. JESWANI, *Environmental sustainability of biofuels: a review*, Proceedings of the Royal Society A, Vol. 476, 2020, 3.; L. ZHU - X. LI - ST. LI, *Examining existing measures for regulating shipping decarbonization and exploring the way forward*, JIML 28 (2022) 2, 106-115; B. GARCÍA - A. FOERSTER - J. LIN, *Net Zero for the International Shipping Sector? An Analysis of the Implementation and Regulatory Challenges of the IMO Strategy on Reduction of GHG Emissions*, in *J Environmental Law* (2021) 33 (1): 85, 1 March 2021, 86 ss.; H. SCHEUING - J. KAMM, *The EU on the road to climate neutrality – is the 'Fit for 55' package fit for purpose?*, in *Renewable Energy Law and Policy Review*, Vol. 10, Issue 3-4, 1 April 2022, RELP 3-4: 4-18.