



IMO
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**RATIFICATION AND EXECUTION OF THE
2013 AMENDMENTS TO ANNEX VI (1997
PROTOCOL) OF THE MARPOL
INTERNATIONAL CONVENTION FOR THE
PREVENTION OF POLLUTION FROM
SHIPS AND COMPLIANCE PROVISIONS
TO THE ITALIAN LEGISLATION**

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EXPLANATORY NOTE

1. Introduction

This drafting project deals with the 2013 amendments to the Annex VI of the International Convention for the Prevention of Pollution From Ships (MARPOL), focusing on the concept of Energy Efficiency in shipping and the reduction of Greenhouse Gases (GHGs) from ships. After a brief analysis of Chapter 4 of this Annex, the purpose of this draft is to focus on the implementation measures not only from a national perspective, but also from the European perspective, Italy being one of the founding members of the present European Union.

Presently, MARPOL Annex VI has been ratified by 80 countries (as at 10/4/2015), but, from the European perspective, 3 EU Member States: Austria, Czech Republic and Hungary, have yet to ratify the Convention. However, the EU Commission is strongly pushing toward their ratification.

The role of Italy is fundamental in preventing air pollution and the reduction of GHGs emissions in the Mediterranean Sea, a sea characterized by very particular oceanographical and ecological conditions and where shipping traffic is very intense. Due to its particular position, shared between EU and non-EU countries, this creates many difficulties in achieving the aims established in MARPOL Annex VI. This is primarily due to the large number of non-EU regional countries who have not ratified the annex or the 2013 amendments.

This draft act strives to create a strict and detailed penalty system, including additional penalties, in order to prevent and limit the breaches to the new IMO standards on Energy Efficiency and face the challenge of global warming, of which the Greenhouse Gases are the main source.

Moreover, from a national perspective, the proposal to establish a system of incentivisation toward energy efficiency in shipping through EEC (Energy Efficiency

Certificates), also called White Certificates, will be suggested. Due to the particular technical features of the shipping sector, it is necessary to clarify the applicable regime of incentives through which shipowners, ship operators and shipbuilders could benefit.

However, as showed in Chapter 4 of Annex VI, this field is in a process of continuous development, considering the ever changing new hi-tech technologies especially for marine engines and the possible use of alternative fuels, such as LNG.

The fundamental aim of the sustainability of marine activities and the continuous improvements to achieve energy efficiency in shipping, leads one to consider the whole maritime sector as a field subject to an endless evolving process. The reason for the need for enforcement in our national legislation of these new standards is not only the development of the so-called blue economy, but especially the reduction of CO₂ that in the last decades have caused serious damages connected with climate change.

2. A brief overview on MARPOL Annex VI

Considering that in the last decades, air pollution has become the major pollutant from shipping, the need for a detailed regulation in this field was deeply felt.

The 1997 Protocol or Annex VI, dealing with the prevention of air pollution, energy efficiency and reduction of Greenhouse Gases (GHGs) emissions, is one of the most important instruments to combat the climate change and pollution by exhaust of marine engine of the ships.

This Annex is part of the International Convention for the Prevention of Pollution from Ships (MARPOL) adopted by the International Maritime Organisation (IMO), a United Nations agency that deals with maritime safety and security, in 1973, later amended by two Protocols in 1978 and 1997 and several important amendments.

Presently applying to 99% of the world's merchant tonnage, this fundamental Convention created as a response to the *Torrey Canyon* disaster, includes 6 Annexes:

- Annex I: Regulations for the Prevention of Pollution by oil (October 1983);
- Annex II: Regulations for the control of pollution by noxious Liquid Substances in Bulk (April 1987);
- Annexes III: Regulations for the Prevention of Pollution by Harmful Substances Carried at Sea in Packaged Form (July 1992);
- Annex IV: Regulations for the Prevention of Pollution by Sewage from Ships (September 2003);
- Annex V: Regulations for the Control of Pollution by Garbage from Ships (December 1998);
- Annex VI Protocol 1997: Regulation for the Prevention of Air Pollution from ships (19 May 2005).

There is an important element that distinguishes the latest Annex, the object of this drafting, from the rest of the above listed annexes: it is the only one not directly related to the sea. It established strict values for different kinds of emissions such as the Ozone Depleting Substances (ODS), Nitrogen Oxides (NO_x), Sulphur Oxides (SO_x), Volatile Organic Compounds (VOCs) and emissions from incinerators.

From the 1980s, after many years of intense negotiations among the members of the IMO Assembly, limits and provisions were finally adopted on 26 September 1997, in a first attempt at notably modest levels, so that it was easier reaching the minimum number of ratifications. But the difficulties to its adoption caused a delay on its entry into force: only the 19 May 2005, therefore, the conditions required had been satisfied when the ratification by Samoa on 18th May 2004, fulfilled the requirement of 15 countries representing at least 50% of the world's gross tonnage.

The reasons for the drive toward the creation of this legal framework could be seen in the important developments that the land-based industry, due to strict regulations on the reduction of emissions, did in the last decades. At the end of the 1990s, the need to act also from the maritime perspective, was heavily felt by the international

community, given that ships were becoming the main source of Sulphur Dioxide (SO₂), at least in Europe.

Through international regulations, constantly updated through the latest studies and technologies discovered, and the implementation measures of the States, important results can be gained towards climate change and the prevention of air pollution. In this regard, the compliance provisions to national legislation have a fundamental role in achieving these goals.

3. The 2013 Amendments and the new Chapter 4

Since 2003, the IMO Assembly started to work on the reduction of Greenhouse Gases from shipping requiring the Marine Environment Protection Committee to develop mechanisms to achieve such goals. Referring to Resolution A.963(23) “Policies and Practices related to the reduction of GHG Emissions from ships”, the priority, at that time, was given to the establishment of GHG baseline and to the development of a methodology to achieve GHG efficiency of a ship in terms of a GHG emission index for ships. But, also the need for technical, operational and market-based solutions was particularly felt.

This has been the starting point of a long process that led, in July 2011, to an agreement on the inclusion of Chapter 4 of MARPOL Annex VI, by resolution MEPC.203(62), that entered into force on 1 January 2013. The object of this new chapter is additional regulations on energy efficiency, that have effects also on the other regulations, such as regarding the introduction of an International Efficiency Energy (IEE) Certificate, that requires further amendment of Chapter II of Annex VI¹.

Chapter 4, which could be considered the first ever global and legally binding CO₂ reduction regime, is specifically composed of:

¹ See the Guidelines on the Surveys and Certification of the EEDI developed by Resolution MEPC.214(63).

- Regulation 19: Application
- Regulation 20: Attained Energy Efficiency Design Index (Attained EEDI)
- Regulation 21: Required EEDI
- Regulation 22: Ship Energy Efficiency Management Plan (SEEMP)
- Regulation 23: Promotion of technical cooperation and transfer of technology relating to the improvement of energy efficiency of ships.

In accordance with Regulation 19, these compulsory measures apply to any commercial ship of 400 gross tonnage (GT) and above with an important exception regarding ships solely engaged in voyages within waters subject to the sovereignty or jurisdiction of the State the flag of which the ship is entitled to fly. Moreover, in accordance with Regulation 2.23 and Regulation 20 of MARPOL Annex VI, the types of ship obliged to apply the new standards are:

- Bulk carriers;
- Tankers;
- Gas carriers;
- LNG carriers;
- Container ships;
- General cargo ships;
- Refrigerated cargo ships;
- Combination carriers;
- Ro-ro cargo ships (Vehicle carriers);
- Ro-ro cargo and Ro-ro passenger ships, and
- Cruise passenger ships with non-conventional propulsion.

For understanding of this regime, it should be taken into account that IMO bases its work on the creation of measures characterized by different features. Such measures could be classified under three headings:

1. Technical Measures, focused on marine engine and the propulsion system: the most important measure in this sense is surely the Energy Efficiency Design

Index (EEDI)² and its purpose is not only promoting the use of more efficient equipment and engines in order to reduce pollution, but it is also being used as the index for evaluating the other technical measures.

Following the definition of the IMO, it could be considered as a non-prescriptive, performance-based mechanism, with the great peculiarity that it is in the hands of the shipowner or of the shipbuilder choosing the specific technologies to use in a specific ship designed for the industry. It is therefore evident that it plays an important role as stimulator of new technologies and measures contrasting the air pollution and, more in general, global warming caused by the GHGs emissions.

Expressed in grams of CO₂ per ship's capacity mile, EEDI is required to satisfy the IMO standards for new ships and it is introduced in four different phases from 2013 to post-2025, as regulatory measures.³ Chapter 4 establishes two kinds of EEDI: the attained EEDI, as regulated by Regulation 20, and the required EEDI, as regulated by Regulation 21.

The attained EEDI can be define as the actual calculated and verified energy efficiency design index value for an individual ship based on the data in the EEDI Technical File. It is calculated for all ships of 400 GT and above, as previously defined, including ships for which EEDI is not required⁴.

The required EEDI instead, is the maximum allowable value of the attained EEDI, calculated for all ship types using 100% of the deadweight at summer load draft, except for passanger ships where gross tons is used.⁵

2. Operational Measures: considering that GHG emissions are not caused exclusively by technical features of the ship itself, also this kind of measures should be taken into account.

² Regulation 20-21 , MARPOL Annex VI

³ Dr Fai Cheng, Head of Strategic Research Group, Lloyd's Register, "IMO Technical Measures in Reducing Greenhouse Gas Emissions from Ships: a Lloyd's Register Perspective", 2011.

⁴ Germanischer Lloyd SE, Guidelines for the Determination of the Energy Efficiency Design Index, Edition 2013.

⁵ *Ibid.*

In this regard, for example, speed reduction or general voyage optimisation measures can make a difference in the reduction of emissions. The Ship Energy Efficiency Management Plan (SEEMP)⁶ and the Energy Efficiency Operational Indicator (EEOI) are created on these premises.

The SEEMP is a management instrument that became formally mandatory on 1 January 2013.⁷ Using the EEOI as a monitoring instrument improves the energy efficiency of a ship in a cost-effective manner.⁸ The EEOI's role is fundamental in promoting development in this field and the creation of new technologies.

3. Economical Measures (or Market-based measures (MBM)): even if they are notably important, these measures do not have, any direct effect on the CO₂ emissions. Nevertheless, they have an important role for the implementation of the technical and operational measures in the national systems, being related to the replacement of conventional fossil fuels by alternative fuels and power sources.

From this premise and the European Union's efforts⁹, came the proposal of this drafting project to create a new incentivisation system for the shipping industry that will be illustrated in the last section.

Finally, particular attention should be given to Technical Co-operation (TC) and transfer of technology relating to the improvement of energy efficiency of ships, expressly established in Regulation 23 of Chapter 4. According to these provisions the national Administration has the obligation to promote and provide, as appropriate, support directly or through IMO to Member States, giving priority to developing countries. In the fulfilment of these obligations, an important role is played also by international organisations or other international bodies, that can co-operate with the States for this purpose. In this sense MEPC 66 established the creation of an *Ad Hoc* Expert Working Group on Facilitation of Transfer of

⁶ Regulation 22, MARPOL Annex VI.

⁷ MEPC.62 2011.

⁸ www.imo.org

⁹ EU Energy Efficiency Directive 2012/27/EU.

Technology for Ship (AHEWG-TT) aimed, to assess the potential implication and impacts of the implementation of IMO energy efficiency regulations and to identify and create an inventory of energy efficiency technologies for ships, identifying also the possible barriers to it.

Italy, as a Mediterranean country, took part, in November 2014, at the IMO Regional Workshop on MARPOL Annex VI on ship energy efficiency and technology transfer, held in Istanbul which was organised by the Regional Marine Pollution Emergency Response Centre for the Mediterranean Sea (REMPEC), in line with the directives of the IMO, that consider these regional workshops fundamental to having a greater understanding and appreciation of the requirements and implications of the implementation and enforcement of Chapter 4 of MARPOL Annex VI.

4. Why Italy needs to ratify and implement MARPOL Annex VI

Italy officially ratified MARPOL Annex VI with the Legge 6 Febbraio 2006 n° 57.

Since shipping is the most fuel efficient mode of mass transport and considering the particular geographical position at the centre of the Mediterranean Sea, the implementation and enforcement at national level of the amendments has a fundamental importance not only for complying with obligations established by the International Maritime Organisation, but also to protect a very sensitive marine ecosystem such as the Mediterranean Sea, that even if it represents only 1% of the world's oceans, it is the habitat of more than 10,000 species and source of life for every country in the region.

In accordance with the Third IMO GHGH Study 2014, the impact of the marine industry in 2012 is estimated at approximately 949 million tonnes of CO₂ and GHGs combining CO₂, CH₄ and N₂O: meaning 2.2% and 2.1% of global CO₂ and GHG emissions on a CO₂ equivalent (CO₂e) basis.

Italy's reasons for ratifying Annex VI are many and fundamental in a long-term perspective. First of all, consideration should be given to the protection of the marine environment and the water under Italian jurisdiction, but also the air quality of the coastal or island communities under Italian jurisdiction should also be accorded the same concern. Apart from the evident advantages for the environment, there are also important benefits for the shipowners and the ports, because, respectively, their ship will be accepted worldwide and because it will be easier for the port authorities to control and limit the levels of pollution.

Furthermore, considering the effect of Greenhouse gases on global warming, the advantages can be considered on a worldwide scale.

The need to act is evident not only from the international perspective, but also at the regional level. In this regard, the European Union implemented Directive 2012/33/EU on sulphur in marine fuels to incorporate the IMO's standards established in MARPOL Annex VI.

Despite significant investments cost that the shipowners will be forced to make, the benefits for the environment in a mid/long-term will be fundamental for the health of the Mediterranean ecosystem.

Nevertheless, Italy, as an active member of the international community, has also general international obligations regarding climate change, given that the greenhouse gases emissions are the main cause of the global warming (i.e. United Nations Conference on Environment and Development, the Kyoto Protocol, United Nations Framework Convention on Climate Change (UNFCCC)).

Air pollution from shipping has a great and at the same time, unfortunately, an undefined impact on the health of the communities living in the inland and coastal regions. The marine engine of sea-going ships emit significant pollutants such as NO_x, SO_x, Particulate Matter (PM), Hydrocarbons and Carbon Monoxide, and their effect on human health and the environment are globally recognised.

Considering the developments in this field and the continuous amendments made by IMO to the Annex VI regulation, in order to comply with our international obligations, the need to rapidly implement and enforce the 2013 amendments is heavily felt and also necessary.

Furthermore, especially in the field of marine environmental law, the current domestic system of sanctions in the field of offences to the marine ecosystems, in accordance with the national, European and IMO provisions, appears fragmented and not very efficient regarding the repression of environmental crimes for marine and air pollution, enshrined in the whole MARPOL Convention. More specifically, this act, therefore, aims also to fill the lacuna in Italy's legal system by providing determined sanctions against the violations of MARPOL Annex VI provisions. Regarding Chapter 4, the shipowners or operators should ensure that the requirements for any ship to keep on board the Ship Energy Efficiency Management Plan (SEEMP), taking into account the new regulation 5.4 of Annex VI, and the International Energy Efficiency Certificate (IEEC) for ships which fall under the requirements of Chapter 4. Italy's maritime administration is, therefore, required to waive the requirements to comply with Regulations 20 and 21 and to verify the attained Energy Efficiency Design Index (EEDI) and, formally establish that each ship has on-board the IEEC and the SEEMP that may form part of the ship's Safety Management System (SMS)¹⁰.

5. The Italian ratification and implementation process

Italy's role should be evaluated on two different levels: Italy as a member of the European Union, that is strongly supporting IMO's efforts to achieve the goals above explained; and Italy as member of IMO, therefore also directly bound by the IMO obligations.

¹⁰ Regulation 22, MARPOL Annex VI.

Dealing with Annex VI in general, Italy, recently, adapted to European limits on the sulphur content in the marine fuels with the legislative decree of the 16th July 2014, n. 112 that made effective the 2012/33/EU Directive, that modified the 199/32/CE Directive which entered into force on the 27 August 2014.

In accordance with the resolution adopted by the IMO in 2008 to modify Annex VI of the MARPOL Convention and the new and more restricted limits above explained, in order to ensure a qualitative minimum level of fuels for ships, Italy decided to make effective the prohibition of the use of maritime fuel with a content of sulphur beyond 3.5%. Simoultaneously, dealing specifically with the 2013 amendments issues, Italy complied with the Directives 2009/29/EC, to improve and extend the greenhouse gas emission allowance trading scheme of the European Community, and to 2012/27/EU on Energy Efficiency.

In accordance with EU legislation, Member States are required to ensure the availability of marine fuels in accordance with the provisions of Annex VI. As an alternative solution for reducing emissions, the States are required to encourage the use of electricity produced on land by the ships at ports.

Italy is a civil law country that follows, generally, a dualist system, abandoning it in favour of the European Union Law. Presently, it could be considered as a monist country regarding the ratification and implementation process of international conventions or agreements in its national system, adopting a direct and automatic incorporation of the international provisions.

As showed by this drafting, some international legal instruments, such as MARPOL Annex VI, require continuous updating due to the various amendments that the IMO adopts. Having said that, it should be considered that usually, in accordance with the Italian Constitution, the Italian practice on the treaty incorporation into the domestic system allows:

- The ordinary proceeding: a legislative or executive act, according to the dealt issue, formally recalling the text of the international

convention, inserted as an annex at the end of the introductory articles and accompanied by a translation in Italian, automatically gives value and authority of law to the international treaty.

- A special proceeding: an execution order is included in *ad hoc* legal act that is considered the same law of authorization of the international treaties for which, in accordance with article 80 of the Constitution, requires the authorization of the Parliament.

In accordance with the Italian Constitution, considering that the power of negotiation and conclusion of international treaties is a prerogative of the Government and taking into account the need of an often required technical knowledge, there is also the possibility that the Executive submits to the Parliament drafts of law dealing not only with the ratification, but also with the compliance provisions to our domestic legal system.

In these cases, before the formal approval of the bicameral legislature composed by the Chamber of Deputies and the Senate of the Italian Republic, the member of the Government representing the interested Ministry involved in the legislative drafting process and related technical activities has the duty to fully complete the draft and the formalities connected with it for further presentation to the Legislative body, within the guidelines and directives of the Presidency of the Council of Ministers, for which it is responsible.

Usually the Italian draft laws are preceded by several explanatory supporting materials, that are formally part of the whole draft document.

These are:

1. An introductory document directed to the Chamber of Deputies and the Senate of the Republic, and the reasons for which the Government chose to negotiate and conclude an international treaty are explained.
2. A general report on the object, in which is included a list of the articles. This part is still descriptive and it has the functions to help

the Parliament to understand the further more technical analysis and, generally, the main features of the draft.

3. Technical-legal analysis: in this part after the technical analysis of the main provisions of the international treaty, the necessity of the ratification and enforcement of the convention are deeply dealt with. It should be considered also the possible laws or decrees dealing already with the same topic, so that also an analysis of the current domestic legal framework in this field is required.
4. Analysis of the impact on the pre-existing legislation: this part is developed to deal with a double aspect. First of all the legal intervention is analysed, then it is focused on the objectives and the expectives aims. Given that the air pollution is a very new topic, the effect of a new legislation in this field shall not create contrast with the existing domestic legal system, and aside from the already mentioned laws, decrees and EU directive dealing indirectly with the 2013 amendments, the adoptability of this act should not theoretically face difficulties.

The Italian jurisprudence often clarified in its decision that the immediate and direct subjects are only States that have ratified the treaty in which the international rule is transmitted. However, the different approach before and after the reform introduced by the *Legge Cost. n. 3/2001* should be noted. Before it was mainly closer to the dualist doctrine, given that international law was considered only after the so-called “*adattamento*”, that means the adoption of an internal law necessary to fulfil State’s obligations in the perspective of the international law. Regarding the fields regulated by law, in order to make effective in our legal system the provisions of an international convention it is necessary, for Parliament to issue an “*ordine di esecuzione*” (execution order). It is a process aimed to make applicable in our judicial system a rule of international law, at the same time this process become a necessary condition for its effectiveness in the national system. In the pre-reform approach, in Italy

there was not this kind of compliance procedure, given that international law was considered “*tamquam non esset*” in the sense that, in absence of a domestic act, no right or obligation could be on the citizens (principle of separation and indifference).

But this approach changed with the reform of Title V of the Italian Constitution, especially when art. 117 (1) is analysed. This article establishes a general compliance rule to customary law: in this regard, if the Italian lawmakers fail to make executive the international treaties binding for Italy, it amounts to a violation of the constitutional law. According to art. 117, in fact, Legislative powers shall be vested in the State and the Regions in compliance with the Constitution and with the constraints deriving from EU legislation and international obligations. In this sense it can be observed that an international treaty is source of international obligations only when there are 2 conditions:

1. The treaty should be in force at the international level;
2. The treaty should be binding on Italy.

The application of the international law in the national system is limited by specific conditions:

1. Adoption of adequate compliance measures to adapt the international law to the national system;
2. Entry into force of the international law through a national act.

Italy could therefore be defined as a monist system for the EU law, with the important limit that every Italian judge who find an issue of incompatibility between the national and EU law shall send it to the Constitutional Court in order to rectify it.

In conclusion, in order to have effect under Italian law, international treaties require not only the signature and ratification, but also the passing of national implementing legislation by the legislature incorporating the provisions of the international instrument into national law.

This act, in accordance with our legal system, will reproduce the full text, following the ordinary procedure, and not the “execution order” method, which is very common in Italy, in which the international treaty is applied simply by referring to the text.

MARPOL Annex VI was ratified on 22 May 2006 by the Italian Government. However Italy must implement the provisions of Annex VI in order to be able to effectively control the emissions and to act in compliance with both EU standards and international regulations.

6. Explanation of the Draft Act

This draft act is composed of 18 articles and divided into 2 parts. The first ratifies and gives full execution to the 2013 Amendments to MARPOL Annex VI, dealing with energy efficiency and the reduction of Greenhouse Gases; the second part, created in order to achieve these goals through a pragmatic approach, includes 12 compliance provisions.

Articles 1, 2 and 6 contain the traditional formulas for the authorization to ratify by the President of the Republic, the execution order and the provision regarding the entry into force of the act. The act begins with defining the terms used and the purposes of application, establishing also the object and the applicability of the provisions.

The draft provides for provisions on the penalty system to apply in case of violations discovered on board during inspections, examinations and investigation. For the latter it is provided the proceeding and a list of the competent authorities that are in charge in accordance with the powers granted to them. Moreover, it is provided for the Ministry of the Environment and Protection of Land and Sea of Italy the obligation of communicating data, every two years, to the IMO. In accordance with the Italian practice and the principle contained in art. 81 and 11 of the Constitution establishes

the ban to request further funding from the public administration for the entry into force of the present act.

This act aiming to harmonize MARPOL Annex VI provisions and the EU legal framework regarding the energy efficiency and the reduction of Greenhouse Gases, as well as remaining in line with the principles of international environmental law and the law of the sea, establishes several measures for the promotion and improvement of energy efficiency on the national territory. This act, therefore, aims to contribute to the national energy savings, to remove barriers in the energy market and to overcome market failures that hamper efficiency in the supply and in end-use efficiency.

For this purpose this act created a system of incentives for the maritime sector, based on the Energy Efficiency Certificate (EEC), also called white certificates. These EEC could be defined as tradeable tools giving proof of the achievement of end-use energy savings through energy efficiency improvement initiatives and projects. Such instruments find their legal source in the Ministerial Decrees of 20 July 2014, as amended and supplemented until now. Any certificate has the value of one tonne of oil equivalent (toe) saved, meaning the value to express yearly quantitative primary-energy saving targets achieved by electricity and natural-gas distributors.

Due to the change to the system made by the Decree of 28 December 2012, setting national quantitative energy-saving targets for electricity and gas distributors from 2013 to 2016 and introducing new parties eligible to submit projects, the transport sector's opportunities to have access to these incentives notably increased.

This legal framework is based on the system of incentives dedicated specifically to the maritime sector that, due to its particular features, until now had no access to the Energy Efficiency Certificate system. The shipping industry, not being mentioned in the measures aiming to the reduction of CO₂ established by the EU Commission in Directive 2012/27/EU, as this is focused on the land-based industry sector, requires this act to start the investments for the compliance to the new IMO standards required in MARPOL Annex VI. Given that in Italy an efficient system for the transport sector exists already, this act aims to make it compatible and accessible to the maritime sector: with improvements to the ship propulsion system, for example, the saving of fuel is notable also considering that a tonne of petroleum is worth about 450 euros.

Finally, this drafting project, in accordance with article 18, strongly recommends that bodies like the Italian Reparto Ambientale Marino del Corpo della Capitanerie di Porto or Institute for Environmental Protection and Research (ISPRA) and the Italian Confederation of the Ship Owner will periodically advise the Government in this field. A copy of MARPOL ANNEX VI has been attached to this draft law. Italy usually attaches the whole of a ratified convention in a pdf form in domesticating them. For this purpose the Convention is also attached herein, albeit not in a pdf form.



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Article 1

Authorization to ratify

1. The President of the Republic is authorized to ratify the 2013 amendments of the 1997 Protocol of Amendment to the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978, with Annex VI, and Appendices, done in London on September 26 1997.

Article 2

Execution Order

1. Full execution is given to the 2013 amendments to the Protocol of 1997, as referred to in Article 1, from the date of its entry into force, in accordance with art 6 of this act.

Article 3

Definitions

1. Unless otherwise specifically provided herein, the definitions set forth in Annex VI shall Apply to this act.
 - i. Ship: a vessel of any type operating in the marine environment and flying any flags, including hydrofoil boats, hovercraft, submarines, floats, fixed and floating platforms;
 - ii. Gross Tonnage (GT): unitless index related to a ship's overall internal volume.
 - iii. International Air Pollution Prevention (IAPP) Certificate: the internationally-accepted documentation that a specific engine meets the international NOX emission limits for diesel engines set out in Regulation 13 of Annex VI.
 - iv. Energy Efficiency Design Index (EEDI): an index quantifying the amount of carbon dioxide that a ship emits in relation to the goods transported. The actual EEDI of a vessel is called the "attained EEDI" and is calculated based on guidelines published by IMO. The result must be below the limit ("required EEDI") prescribed in MARPOL.
 - v. Ship Energy Efficiency Management Plan (SEEMP): mechanism for a company and/or a ship to improve the energy efficiency of a ship's operation and preferably link it to a broader corporate energy management policy. All ships must have a SEEMP on board before the issuance of the first IEEC.
 - vi. IEE Certificate: certificate that is mandatory for all vessels of 400 gross tonnage and above. For new ships, the certificate will state both the attained and required EEDI of the vessel.

- vii. Survey: an action performed by an authorized classification society on board a ship. It shall conduct test and examination required for initial and in-service inspection for certification, periodic re-examination, dry-dock examinations.
- viii. Ship examination or inspection: an action performed to verify shipboard compliance with requirements of Annex VI, as amended in 2013.
- ix. Energy Efficiency Certificate (EEC): tradable instruments giving proof of the achievement of end-use energy savings through energy efficiency improvement initiatives and projects.
- x. Tonnes of Oil Equivalent (TOE): value to express yearly quantitative primary-energy saving targets achieved by electricity and natural-gas distributors.

Article 4

Application

1. The provisions of this act shall apply to any commercial ship \geq 400 gross tonnage (GT), that is in:
 - i. the internal waters, including ports, within it is applicable the system provided by the MARPOL Convention 73/78;
 - ii. the territorial sea;
 - iii. straits used for international navigation subject to the regime of transit passage, as specified in Part III, section 2, of the 1982 United Nations Convention on the Law of the Sea;
 - iv. the exclusive economic zone or equivalent zone established in accordance with international and national law.
2. The provisions of this act shall not apply to ships solely engaged in voyages within waters subject to the sovereignty or jurisdiction of the State the flag of which the ship is entitled to fly.

Article 5

Statement of Purposes

1. In order to improve maritime safety and to enhance protection of the environment from air pollution by ships, this act formally ratified the 2013 amendments to MARPOL Annex VI.
2. For the same purpose, this act provide the enforcement and the implementation of MARPOL Annex VI.
3. As set forth in art. 6 and 7, this act provides a penalty system against the violations discovered during inspections, examinations and investigations.
4. This Act, implementing the 2013 amendments to MARPOL Annex VI, in accordance with the Directive 2012/27/EU and the criteria established by the Law of 6 August 2013, n. 96, establishes a framework of measures for the promotion and improvement of energy efficiency. This framework aims to contribute to the national energy savings; to remove barriers in the energy market and to overcome market failures that hamper efficiency in the supply and in end-use efficiency.

Article 6

Entry into force

1. This law enters into force the day after its publication in the Gazzetta Ufficiale.

Compliance Provisions

Article 6

Requirements

1. It is formally required to the shipowners and ship operators to ensure that:
 - i. There is on board a IAPP Certificate as required or, for ships under 400 GT, the appropriate alternative;
 - ii. The attained EEDI and the required EEDI are calculated for each new ship or after a major conversion as required under Chapter 4 of Annex VI;
 - iii. For any ship a specific SEEMP shall be kept on board. The SEEMP shall not be subject to approval or verification by the Administration;
 - iv. Any ship, as referred to in article 4 of this act, shall keep on board an International Energy Efficiency (IEE) Certificate issued by Rina Service s.p.a. , as established by Decree 18 December 2013. For new ships, an IEEC is to be issued at the vessel's initial survey provided the EEDI has been verified and the SEEMP is on board. For existing ships, the IEEC is to be issued on the first intermediate or renewal survey for the EIAPP certificate after 1 January 2013 provided the SEEMP is on board.

Article 7

Air pollution penalties

1. Unless the act constitutes a more serious crime, the commander of a ship flying any flag, but also the ship owner and/or the ship operators, in case the breach of the provisions of Annex VI, shall be punished with imprisonment from three months to one year and to a fine of 5,000 euros per violations, per day that the requirements of this law are not met.
2. If the violation referred to in paragraph 1 causes permanent damages or, however, particularly serious damages, to the water quality, to the flora, fauna or to any part

of them, the imprisonment shall be from six months to two years and a fine from 8,000 to 40,000 euros.

Article 8

Additional penalties

1. To the commander, enrolled in the seafarers' registry held by the competent maritime authority, condemned for the offenses referred in art.1, his professional title shall be suspended for not less than six months, in accordance with art. 1083 of the Codice della Navigazione.

Article 9

Prohibition of docking

1. Any ship not in compliance with the IMO standards established in Annex VI, as amended in 2013, is prohibited of docking in all Italian ports until the required changes to the marine engines are made.

Article 10

Surveys and inspection

1. Surveys and inspections on the compliance of the provisions of Annex VI, as amended in 2013, and ratified in this act are carried out by the authorized classification societies and by the officers and agents of the judicial police of the Corpo delle Capitanerie di Porto della Guardia Costiera and by the officers and non-commissioned officers of the Italian Navy, and by the other subjects listed in art. 1235 of the Codice della Navigazione, within the limits of the service which they are in charge of on and in accordance with the powers granted to them.
2. Such activities are to be conducted under the supervision of the port commander.

Article 11

Communication data

1. Within three years from the entry into force of the present act and, subsequently, every two years, the Ministry of the Environment and Protection of Land and Sea of Italy shall send a report to the IMO.

Article 12

Financial Dispositions

1. Following the entry into force of the present act, no further funding will be requested from the public administration.
2. The interested administration shall apply the provisions of the present act with the human and financial resources available in the present legislation.

Article 13

Access of the maritime sector to the Energy Efficiency Certificate

1. This act gives formally access to the maritime sector to the mechanism for the promotion of energy efficiency based on the Energy Efficiency Certificate (EEC), in accordance with the Directive 2009/29/CE, approved by interministerial decree of 8 March 2013.

Article 14

Incentives

1. Ship owners and ship operators, considered for the purposes of this act as volunteers, can take advantage of the new mechanism as follows:
2. The shipowner and shipoperator who comply with IMO standards set out in Chapter 4 of Annex VI within 3 months before the expiration of the deadline, will have access to the following types of certificates, as regulated by the Ministerial Decrees of the 20 July 2004, as subsequently amended and supplemented, and by the Ministerial Decree of 29 December 2012:

- i. Certificate of type IN: they not certify real savings but are issued as a result of rewarding attributed to the intervention according to its degree of innovation.
 - ii. Certificate of type E: they do not certify real savings but are issued as a result of rewarding attributed to the intervention in line with the impact on the reduction of atmospheric emissions.
3. The ship owner, the shipbuilders and the ship operators that invest in major projects (which generate additional savings in one year of at least 15,000 Tonnes of Oil Equivalent (TOE) saved and have a service life of over 10 years) will receive an increasing bonus if such projects involves major technological innovations and / or significant reductions in air emissions.

Article 15

Additional incentives

1. Energy Efficiency Certificates can be combined with:
 - a. A reduction in tax relating to the purchase of equipment and the engine modifications;
 - b. Guarantee funds;
 - c. Grants for interest;
 - d. Incentives recognized at regional, local and EU for energy efficiency measures.

Article 16

Temporal Validity

1. Energy Efficiency Certificates are valid for one year and must be renewed annually to continue to benefit from any incentives contained in this act.

Article 17

Competent Authority

1. The GSE (Gestore Servizi Energetici), as established by Decree 28 December 2012, shall be in charge of the management, evaluation and certification of the

savings related to energy efficiency projects, incentives and all other measures undertaken as part of the mechanism of the Energy Efficiency Certificates.

Article 18

Advisory obligation

1. It is recommended that bodies like the Italian Reparto Ambientale Marino del Corpo della Capitanerie di Porto or the Institute for Environmental Protection and Research (ISPRA) and the Italian Confederation of the Ship Owner (CONFITARMA) will periodically advice the Government on this field.