

## REGULATORY IMPACT ASSESSMENT (R.I.A.)

**Measure:** Draft Decree of the Minister for Infrastructure and Transport, in agreement with the Minister for Enterprises and Made in Italy and the Minister for the Environment and Energy Security, laying down procedures for the approval and installation of power supply systems on recreational craft and related propulsion engines

**Competent administration:** The Ministry for Infrastructure and Transport

**Contact person of the competent administration:** Legislative Office - 06/4412.3201

### SUMMARY OF THE RIA AND MAIN CONCLUSIONS

#### Reasons for intervention

The draft decree gives effect to the provision referred to in Article 19a of Legislative Decree No 5 of 11 January 2016 and governs the procedures relating to the installation of electric propulsion systems on recreational craft.

The lack of regulation in this area currently hinders the development of using electricity for the propulsion of recreational craft. However, it must be considered that the possibility of adopting electric propulsion systems in the recreational craft sector would allow for a number of advantages, in particular:

- economic advantages in terms of the management of recreational craft, given the reduction in the operating cost of an electric-powered craft compared to a craft powered by traditional fuels;
- economic/productive advantages, linked to the possibility of developing a new sector, consisting of undertakings entering the market of electric propulsion installations, having regard both to new constructions and to the conversion of craft already existing on the market;
- environmental advantages, given that an electric engine has no gaseous emissions, unlike internal combustion engines, and also significantly reduces noise emissions.

#### Objectives pursued

The purpose of the measure is to regulate the use of electric propulsion systems, also combined with internal combustion engines, on recreational craft, thus aligning the national legislation in force (Legislative Decree No 5 of 2016) with the provisions of technical standard UNI EN ISO 16315 (Small craft – Electric propulsion systems) and Directive 2013/53/EU, harmonising the procedures laid down in the technical standard for the use of electric propulsion systems with those required for the CE marking of recreational craft. In addition, the aim of the measure is to increase the attractiveness of investments in the domestic craft sector and to promote the conditions for an increase in the commercial volume of domestic production, including to foreign markets, with a view to making recreational craft more environmentally friendly.

#### Option chosen

The intervention, as provided for in Article 19a of Legislative Decree No 5 of 2016, takes into account the general opportunity to proceed with the technological adaptation of the propulsion systems of recreational craft. To this end, it is established that the use of electricity for the propulsion of recreational craft must be in accordance with the provisions of standard UNI EN ISO 16315 – Small craft – Electric propulsion system and its subsequent amendments and additions, or with the technical standard whose reference is published in the Official Journal of the European Union (C 332 of 9 September 2016).

## Consultations carried out

The proposed measure, in addition to taking into account the experience gained by the Administration following the entry into force of the recreational craft code (Legislative Decree No 171 of 18 July 2005) and the related implementing regulation (Decree No 146 of the Minister for Infrastructure and Transport of 29 July 2008), through the interpretation, coordination and guidance activities implemented (issue of circulars, replies to queries received from users and peripheral offices, including through the General Headquarters of the Harbour Masters' Office and the Directorate-General for Motor Vehicles), was drafted taking into account the observations and proposals made by the bodies and trade associations operating in the recreational craft sector. In addition, the experience gained by the Administration following the issuance of Decree No 182 of the Minister for Sustainable Infrastructure and Mobility of 13 October 2022, concerning the procedures for the approval and installation of liquefied petroleum gas (LPG) fuelling systems on recreational craft and related propulsion engines, was duly taken into account, as also provided for in Article 19a of Legislative Decree No 5 of 2016.

## 1. CONTEXT AND PROBLEMS TO BE ADDRESSED

The recreational craft in circulation are mainly equipped with engines powered by traditional liquid fuels (petrol and diesel). Although the current legislation regulates, from the point of view of environmental protection, the maximum permissible emissions for these fuels, there is an increasing need to diversify the sources of energy supply, drawing on the experience gained in the automotive and land transport sectors. It is well known that internal combustion engines, especially if they run on petrol or diesel, are a source of air pollution due, *inter alia*, to the concentration of emissions produced.

To date, however, in the absence of specific regulations, it is not possible to use electricity for the propulsion of recreational craft: hence the need to implement the provisions of Article 19a of Legislative Decree No 5 of 2016, in particular to identify the technical regulation that will allow the use of the aforementioned energy also in the context of the propulsion of recreational craft.

Potential recipients of the proposed intervention can be identified as:

- owners of recreational craft who, after a limited investment, will be able to recover fairly quickly the costs (also based on the use and frequency of use of the craft) incurred for the conversion of the nautical craft to electric propulsion;
- companies managing electricity charging stations (which can be installed in ports and tourist ports) which, in return for initial infrastructure investments, will then have an economic return from the distribution of electricity;
- operators who will handle the installation of electric propulsion systems on recreational craft or the conversion of existing engines. It is a chain that includes the manufacturers of the equipment, their distribution channels, the workshops that will deal with the transformations, etc. This will be accompanied by a local supply chain for supplies and subcontracting necessary for the completion of the transformations;
- bodies responsible for certifications, which must certify the compliance of the processes carried out with the applicable technical standards.

Given that, as mentioned above, electric propulsion systems will be installed on both new and existing craft, in order to quantify the recipients of the intervention, as identified above, it is considered useful to provide some data on the size of the recreational craft, which will potentially be subjected to the reconversion to the electric propulsion system.

As at 31 December 2022<sup>1</sup>, 81 464 recreational craft are registered in Italy, of which 66 308 are registered in the peripheral maritime offices of the Harbour Masters' Offices and 15 156 at the provin-

---

<sup>1</sup> Data from 'Boating in Italy 2022' by the Ministry for Infrastructure and Transport

cial offices of the Civil Motor Vehicles Office. There are 157 950 berths available for docking and mooring (as of 30 September 2022). The data on recreational craft is partial because it represents only part of the recreational craft in circulation, given that recreational craft and personal watercraft, being movable property that is not registered, are not subject to compulsory registration and, consequently, are not recordable. Proof of this is the fact that the number of berths available is significantly higher than the registered craft. Furthermore, it should be borne in mind that many recreational craft, especially small ones, do not use berths, at least for most of the year, as they use 'dry storage' facilities and are put into water only when actually used.

For the sake of clarity, a table is provided showing the evolution between 2009 and 2022 of recreational craft subject to registration, with a length of more than 10 metres, and of berths located along the Italian coast. The trend of the two time series shows the number of registered recreational craft increasing up to 2012 and then in slight decline, while the berths register an increase, particularly from 2013 onwards, followed by a slight decrease in the last two years.

Number of recreational craft over 10 meters in length registered in the peripheral Maritime offices and number of berths in Italy - Years 2009-2022														
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Craft > 10 m	44 306	46 353	47 646	47 671	47 239	46 924	46 329	45 064	44 711	43 506	43 752	44 032	44 427	43 953
Total berths	146 166	149 605	151 632	148 684	147 804	148 829	157 567	158 088	158 548	161 673	162 455	158 452	156 465	157 950

Note: data as of 31 December, except for berths from 2018 onwards, which refer to 30 September, taken from 'Boating in Italy 2022' by the Ministry for Infrastructure and Transport

Other potential recipients of the measure, currently or in the future, are:

- certification bodies: currently, in the field of recreational craft, the operators are Udicer Nautitest S.r.l, Istituto Giordano S.p.A., Rina Services S.p.A, ANCCP S.r.l., SCS S.r.l., Quality & Security S.r.l., A.N.S. S.r.l., a company which, according to the provisions of the draft measure, will have to certify the suitability requirements of electric propulsion systems;
- operators who will be responsible for the installation of electric propulsion systems and the conversion of existing engines to electric power: although it is difficult to quantify, given the need to verify the future development of electric engines, these operators include the 859 companies currently operating in the shipbuilding sector;
- operators distributing and supplying electricity to charging stations: at the moment, more than 60 undertakings operate in this sector, although the activity is now limited to normal outlets for the supply of electricity for quayside services, thus excluding engine charging stations, which are *de facto* absent in ports. However, it is clear that the adoption of the regulation on electric propulsion systems could help to boost the development of a rational network of charging stations also in the recreational craft sector, as is happening in the land transport sector.

## 2. AIMS OF THE INTERVENTION AND RELATED INDICATORS

### 2.1 General and specific aims

The measure is aimed, in general, at environmental protection, an objective pursued through the use of energy sources that pollute less than traditional liquid fuels (petrol and diesel). The use of electricity for propulsion engines in fact makes it possible to:

- eliminate exhaust gas emissions, typical in traditional engines, emissions that have a particular impact on the atmosphere, especially in locations with a high concentration of recreational craft;
- significantly reduce noise emissions, with a consequent reduction in noise pollution.

The specific aim is to adopt the regulation on the use of electric propulsion on recreational craft, pursuing better quality and timeliness of the regulatory framework in the field of recreational craft, with positive effects also in terms of commercial competitiveness for the entire sector. The adoption of these regulations will help to create favourable conditions for adapting the competitiveness and attractiveness of investment in the national craft sector to international and EU standards, as well as to promote the commercial volume of domestic production to foreign markets, with a view to a greater environmental compatibility for recreational craft.

## 2.2 Indicators and reference values

Indicators of the degree of achievement of the objectives will consist mainly of:

- the number of installation companies authorised by the Administration;
- recreational craft and electrically powered engines;
- data and statistical analysis relating to the general development of the recreational craft sector.

Monitoring the increase in the number of electrically powered recreational craft over time, following the entry into force of the new regulation, will serve as a valid indicator to assess the growth and satisfaction of users interested in choosing this type of power supply.

In particular, while it should be noted that, at the moment, no data or statistics are available regarding the number of recreational craft on which electric propulsion systems are installed, including abroad, it should be observed that the effects of the measure, after its entry into force, can be deduced both from newly built recreational craft that will install electric propulsion systems and from existing recreational craft converted to an electric propulsion system, as well as, for the purposes of monitoring the benefits in terms of environmental protection, from the total electrical power installed annually in the craft in question.

## 3. OPTIONS FOR INTERVENTION AND PRELIMINARY ASSESSMENT

Option zero does not appear to be feasible. The draft decree consists of the implementation of Article 19a of Legislative Decree No 5 of 2016: as already mentioned in Section 1, in the absence of a specific regulation on the use of electricity for the propulsion of recreational craft, it is impossible to use that energy source in the nautical sector. Furthermore, option zero is excluded due to the fact that recreational craft is a rapidly evolving sector, also because of its global vocation, which requires it to remain competitive and capable of adapting to technological innovation.

Having ascertained, therefore, the need to issue the measure drawn up, it should be noted that the option of intervention was already outlined, to a large extent, during the approval of the aforementioned Article 19a of Legislative Decree No 5 of 2016. In fact, in the explanatory note to the provision (Article 19a was inserted by Article 58(1)(a) of Legislative Decree No 229 of 3 November 2017), it is stated that “... *it is provided that the technical regulations governing fuel systems and related propulsion engines fuelled with liquefied petroleum gas, liquefied natural gas, methane and electric engines on recreational craft, whether newly built or already placed on the market, comply with the technical regulation drawn up in compliance with European legislation ...*”.

Therefore, having already identified, in fact, the technical regulation to be followed, it should be pointed out that the current regulatory framework excludes, in any event, the possibility of direct application of the reference technical standard relating to electric propulsion for nautical use (UNI EN ISO 16315), given, *inter alia*, that it is necessary to regulate the procedures for the intervention of the notified body in accordance with the procedures and documentation provided for by the legislation currently in force (manufacturer’s declaration of conformity), as well as with regard to the CE marking provided for by Legislative Decree No 5 of 2016.

With regard to the above, and given the need to fully implement the requirements contained in standard UNI EN ISO 16315, there is a need to regulate the intervention of certification bodies. The op-

tion that does not provide for the intervention of such bodies does not appear to be feasible: therefore, the certification bodies already operating in the recreational craft sector have been identified in implementation of Legislative Decree No 5 of 2016. In relation to the above-mentioned requirements, not least that of ensuring the intervention of the notified bodies of recreational craft in a well-defined regulatory framework, two distinct types of certification bodies have been provided for:

- approved body: a compliance assessment body also authorised to assess company quality systems, which works, in accordance with the provisions of the draft regulation, to ensure the professionalism of the staff of the installation companies responsible for the installation of electric propulsion systems;
- compliance assessment body: in this case, the body intervenes to ensure that all operations and documentation required by the reference technical standard are included in the current regulatory framework, to ensure compliance with the safety standards related to the use of electric propulsion.

From a purely technical point of view, the reference to the relevant technical standard in the sector in question (UNI EN ISO 16315) has been chosen, in fact as a mandatory choice, given that it is internationally recognised, as stated in the communication in the Official Journal of the European Union C 332 of 9 September 2016. The reference to the aforementioned technical standard ensures the reliability and safety of the installations, without prejudice to the choices regarding certification and controls made in the drafting of the draft measure, which are briefly described below.

First of all, the requirements that the installation company must meet are specified in addition to those already laid down in the relevant technical standard. In particular, staff must hold a certification issued by an accredited body in accordance with UNI CEI ISO/IEC 17024, which ensures that staff working within the installation company is suitably qualified in terms of competence, knowledge and skills. Registration of the installation company with the Chamber of Commerce is also required, indicating the specific sector of activity for the installation of electric propulsion systems. In addition, the installation company is required to have an approved quality management system for products relating to electric propulsion systems. For the purposes of awareness and monitoring of the installation companies, it was considered appropriate to stipulate that the installation company shall communicate to the Ministry for Infrastructure and Transport the approval of its quality system and the start and end of the installation activity of the power systems in question.

In order to ensure the effectiveness of the required control by the certification bodies, it is stipulated that they may access the premises dedicated to the installation of the systems in question and acquire the relevant documentation, to verify, even during the validity period of the issued quality certification, the continuation of compliance with the requirements and with the relevant standards. In this way, a regulatory framework has been chosen that provides, in addition to the clarity and certainty of the reference standards, clear elements for the control of the installation companies which, also through the quality control systems, will be supervised in order to ultimately guarantee the safety of the installed systems.

Other provisions aimed at the safety of installations relate to the technical certification of electrically powered craft, for which the provision also provides:

- that the declaration of conformity provided for in Annex VIII to Legislative Decree No 171 of 2005 must also contain the reference to the technical standard referred to above;
- that the owner's manual referred to in Legislative Decree No 171 of 2005 shall also contain specific instructions and information on the safety of electric power supply systems, in order to ensure user safety by means of documents containing instructions for use that comply with the relevant harmonised technical standard.

With regard to periodic checks, it was not considered appropriate to provide for specific periodic checks on electric propulsion systems, since the ordinary checks concerning the safety and effi-

ciency of recreational craft and the periodic safety visits provided for in Article 50 of Decree No. 146 of the Minister for Infrastructure and Transport of 29 July 2008 are sufficient.

#### 4. COMPARISON OF THE FEASIBLE OPTIONS AND IDENTIFICATION OF THE PREFERRED OPTION

Regulatory intervention has been identified and outlined by the legislator in order to enable technological innovation in recreational craft engines. On the other hand, since the choice of the applicable technical standard is almost constrained, for the comparison of the feasible options, please refer to Section 3.

##### 4.1 Economic, social and environmental impacts by target group

The measure is an integral part of the general work of revising the Recreational Craft Code. As already mentioned, this scheme regulates the regulation of electric power supply systems on recreational craft and the related propulsion engines and does not entail new or greater burdens, or decreases in revenue, on public finances, nor increased expenses for citizens, but aims at a greater protection of general public interests, such as environmental protection and navigation safety.

There are no disadvantages or critical elements for the adoption of the regulatory intervention. Since this is an absolute innovation in the sector, which in any case leaves the interested parties the possibility of choosing between traditional power supply and electric power supply for recreational craft, no expected costs are foreseeable. Furthermore, the measure may lead to the creation of new job opportunities in the context of new propulsion systems (for example, for the conversion of traditional engines into electric ones).

The purpose of the measure being adopted is, in general, to ensure consumer safety, while at the same time guaranteeing the user greater cost-effectiveness in operating the vessel. The greater cost-effectiveness of the vessel is mainly due to the higher energy efficiency of an electric engine compared to an internal combustion engine. While the latter's efficiency, even in the most advanced engines, does not exceed 40 %, in electric engines the efficiency reaches up to 90 %, ensuring that the energy input is almost entirely transformed into work and minimally dissipated in the form of heat. This factor leads to substantial cost-effectiveness, despite the recent increases in the cost of electricity due to the current international situation. It should also be noted that conversions can also be carried out on vessels with internal combustion engines by installing a hybrid power system. In these cases, a reduction in fuel consumption is achieved depending on how electric propulsion is used in the hybrid system.

To clarify the above, the following data are provided (source: Ministry for Enterprises and Made in Italy).

Average monthly fuel and energy prices	
August 2024	
Petrol	1 817.95 €/1 000 litres
Diesel	1 693.30 €/1 000 litres
LPG	723.35 €/1 000 litres

Since no data are available on the operating costs of an electric engine in the recreational craft sector, the data relating to the automotive sector are taken as a reference. In this regard, it should be noted that the travel costs of electric cars are much lower than those of cars powered by traditional fuels, particularly when charging is carried out at low-power charging stations, which require longer charging times than rapid or ultra-fast charging stations, but are widely usable in the recreational

craft sector, given the long periods of stay in ports and tourist moorings of the craft, even during their use (for example, by many boaters who usually spend long periods on board on their moored craft).

In the automotive sector, for a small car mainly used in cities, the annual cost of refuelling is half that of a petrol car. There is an advantage also compared to a diesel car.<sup>2</sup>

In light of the foregoing, although the installation and use of an electric propulsion system entails initial installation costs, it entails, as already pointed out in the paragraph relating to the reasons for the intervention, significant savings compared to the use of a traditional fuel propulsion system. In fact, assuming the installation of an electric propulsion system on a small recreational craft, with the craft being used for 300 hours per year and an average fuel consumption of 30 litres/hour for petrol (annual total of 9 000 litres) and 20 litres/hour for diesel (annual total of 6 000 litres), the following is obtained using the fuel cost table as of August 2024:

Fuel cost for 300 hours/year of use	
Petrol: Euro/l 1 817.95 x l 9 000	Euro 16 362
Diesel: Euro/l 1 693.30 x l 6 000	Euro 10 160
Electricity:	Euro 8 411 (estimate)

The use of electricity also becomes competitive with respect to the installation of a diesel engine, also in view of the higher maintenance cost of a diesel engine compared to a petrol engine of equal power. The payback periods for the installation of an electric propulsion system vary, of course, depending on how much the recreational craft is used.

It should also be borne in mind that the average lifespan of a recreational craft is much longer than that of a car. This makes it possible to amortise the costs incurred, as well as to benefit from the reduction in operating costs, for periods of time longer than the corresponding periods in the automotive sector.

As far as Italy is concerned, the recreational craft sector, both at sea and on lakes, is particularly developed, but so far it has not yet been affected by an electric engine power supply project. If clear and comprehensive legislation were introduced that would allow the project to start, a thousand conversions per year (in the early years) could be considered, which could certainly increase with users' awareness of the option and benefits.

To this must be added considerations regarding the positive environmental impact achievable through electric propulsion, which is less polluting than traditional liquid fuels (petrol and diesel). As previously mentioned, the use of electricity for propulsion engines allows:

- the elimination of exhaust gas emissions, typical of a traditional engine, emissions that have a particular impact on the atmosphere in locations with a high concentration of internal combustion engines, such as ports and navigation areas close to the coast;
- the significant reduction in noise emissions, with a consequent reduction in noise pollution, which is particularly noticeable, especially but not only, during periods of high tourist numbers.

Given the absolute novelty of the regulations in question in our country, no technical documentation is yet available on the quantification of the environmental benefits, albeit certain, for example in terms of reducing harmful emissions into the atmosphere. On the other hand, it is also not possible to assess any impact on the disposal of spent batteries, given that the technical standard that should regulate the sector (*Small Craft Li – Ion Batteries*) is still being developed by the International Technical Committee ISO – TC 188.

<sup>2</sup> SOURCE: <https://www.altroconsumo.it/auto-e-moto/automobili/news/costo-rifornimento-au=to-elettriche#:~:text=L'elettrico%20conviene%20a%20casa&text=Nel%20caso%20di%20un'utilitaria,euro%20contro%20pi%C3%B9%20di%201.000>

Therefore, it is easy to envisage a massive adoption of electric propulsion in inland waters and in all those natural areas where strict measures are in place to protect the environment and where it is essential to ensure a high standard of air and water quality. In fact, the disadvantages due to the limited range of electric propulsion engines compared to those using traditional fuel are certainly reduced in cases where the distances to be covered are short, as is the case in navigation in inland waters (for example, in the navigation of the lakes of northern Italy).

## **4.2 Specific impacts**

There are no short- and medium- to long-term disadvantages or critical elements arising for the direct and indirect addressees from the adoption of the proposed draft decree.

Moreover, there are no direct or indirect negative or distortive effects on the proper competitive functioning of the free market and on the overall competitiveness of the economies linked to the recreational craft sector.

The intervention aims to fully implement the current recreational craft code, expanding the types of alternative power supplies that can be used on board recreational craft, introducing, for the benefit of private and professional users, a current regulation, also from a technological point of view, which addresses an evident regulatory gap.

The intervention does not entail any disadvantages and, at the same time, guarantees collective advantages deriving from greater usability, accessibility, and cost-effectiveness in the recreational craft sector, as well as a lower environmental impact.

The advantages, both in the short and medium-long term, accrue to the direct recipients (pure or commercial boaters). Moreover, thanks to the use of innovative technologies and less polluting fuels, positive effects in economic and tourism terms may be expected. Advantages can also be derived for companies installing electric power systems, which will thus be able to increase their customer base.

The following impacts are assessed:

### **A. Effects on SMEs (SME Test)**

There is no data available as the measure is innovative. In fact, at the moment there are very few craft with electric propulsion, precisely because of the lack of specific national regulations. However, it is reasonably conceivable that the entry into force of the measure could lead to an increase in electricity distribution facilities, with multiplicative effects on the economy of SMEs.

### **B. Effects on competition**

There are no direct or indirect negative or distortive effects resulting from the adoption of the proposed draft decree on the proper competitive functioning of the free market and on the overall competitiveness of the economies linked to the recreational craft sector.

### **C. Information burdens**

There are no additional information burdens beyond those already in force. However, in order to ensure the transparency and publicity of the approved installation companies, it is expected that the installation company will notify the Ministry for Infrastructure and Transport of the approval details of its quality system, the start and end of its activity, any changes, and will notify the approved body that approved the quality system of the intended changes to the quality system. It is also envisaged that a list of installation companies will be established and published at the aforementioned Ministry, in order to ensure transparency in the installation sector, while at the same time discouraging possible illegal activities.

### **D. Compliance with the minimum levels of European regulation**

When drawing up the draft measure, account was taken of the legislation on recreational craft in force in the other Member States of the European Union, and the draft measure will be the subject of technical consultation through the competent offices of the Ministry for Enterprises and Made in Italy at the European Commission, in accordance with Directive (EU) 2015/1535 of the European Parliament and of the Council of 9 September 2015, which lays down a procedure for the provision of information in the field of technical regulations and rules on Information Society services.

### **4.3 Justification of the preferred option**

In accordance with Article 19a of Legislative Decree No 5 of 2016, the option, which is also partially constrained by what is expressly provided for in the guidelines contained in that provision, has been drawn up and shared with the working group which, on the basis of its own knowledge, including technical knowledge, has drafted this draft decree. Moreover, as has already been pointed out above, the choice of the technical rule applicable to the sector in question is in fact mandatory.

Therefore, in addition to what has already been explained in the previous sections, today's draft regulation follows, as far as possible, the regulation governing LPG propulsion, with the necessary differences linked to the specificities of the two fuel systems (LPG and electricity). It should be noted, however, with reference to the provision referred to in Article 19a, paragraph 4, letter (h), of Legislative Decree No 5 of 2016, which lays down rules on periodic checks on installations, that the reference technical standard (UNI EN ISO 16315) concerning the electric propulsion systems of recreational craft does not provide, unlike the technical standards relating to LPG, for the completion of an installation certificate, nor are there any obligations regarding any periodic inspections. Consequently, this draft measure does not provide for specific periodic checks on electric propulsion systems, since the ordinary checks concerning the safety and efficiency of recreational craft and the periodic safety visits provided for in Article 50 of Decree No. 146 of the Minister for Infrastructure and Transport of 29 July 2008 are sufficient.

## **5. IMPLEMENTATION AND MONITORING ARRANGEMENTS**

### **5.1 Implementation**

The implementation of the regulatory intervention is entrusted, for matters within its remit, to the Ministry for Infrastructure and Transport, in its central divisions (**Directorate-General for the Sea, Maritime and Inland Waterway Transport**) and peripheral offices (Civil Motor Vehicle Offices and Maritime Offices).

Once approved, the Regulation will be widely advertised by publication in the Official Journal of the Italian Republic and in the relevant sections of the institutional website of the Ministry for Infrastructure and Transport. Although the actual implementation of the new provisions is entrusted to the initiative of private individuals, it is nevertheless reasonably foreseeable that, as has already been the case in the motor vehicle sector, the lower operating cost of a craft with electric propulsion compared to those using traditional fuels may represent a great attraction for boaters, given, moreover, the high fuel consumption of recreational craft. On the part of installation companies, it is foreseeable that the job potential, especially in locations with a wide prevalence of nautical recreational craft, will serve as an incentive for installers to obtain authorisation to operate in the installation of electric systems on existing craft.

### **5.2 Monitoring**

Indicators of the degree of achievement of the objectives consist mainly of:

- the number of installation companies that will apply to the Administration for authorisation;
- use of electrically powered engines in domestic recreational craft.

Monitoring will be carried out by the Directorate-General for the Sea, Maritime and Inland Waterway Transport of the Ministry for Infrastructure and Transport. Data on electric engines will, in fact, be available as it is entered in the central telecommunication system for recreational craft established pursuant to Article 1, paragraphs 217 et seq., of Law No 228 of 24 December 2012. In addition, the data on the number of authorised installation companies will always be available to the Ministry, given the provision for the register of installers and the requirement for mandatory notification of any changes subsequent to authorisation (notification as set out in the annex to the draft decree).

## **CONSULTATIONS CARRIED OUT DURING THE RIA**

As a specific preparatory activity, the central administration consulted the most representative sector associations, inviting them to participate in study groups for the development of the new legislation. As part of the work of these groups, they were asked to prepare analyses, contributions, and draft proposals in the areas of their interest.

Following the consultation phases, the Directorate-General for the Supervision of Port System Authorities, Port Infrastructure, and Inland Waterway and Maritime Transport of the Ministry for Infrastructure and Transport set up a restricted working group of its own officials which, on the basis of the contributions received, progressively drew up the proposed draft decree.

The proposed intervention therefore resulted from a constructive and intensive discussion with the public and private stakeholders and took into account the contributions received. Among the private entities, it is worth mentioning UCINA Confindustria Nautica and the representatives of the certification bodies for recreational craft.

## **ASSESSMENT PATHWAY**

During the meetings of the working group, safety issues related to the use of electric propulsion systems on board recreational craft were addressed. Through a series of meetings, a shared path was traced that led to the drawing up of the draft decree, also taking into account the regulation referred to in Decree No 182 of the Minister for Infrastructure and Transport of 13 October 2022, laying down procedures for the approval and installation of liquefied petroleum gas (LPG) fuelling systems on recreational craft and related propulsion engines, a regulation provided for by the same provision which provides for the issuing of today's measure (Article 19a of Legislative Decree No 5 of 2016).