DIRECTIVE 2003/44/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL
of 16 June 2003
amending Directive 94/25/EC on the approximation of the laws, regulations and administrative provisions of the Member States relating to recreational craft
(Text with EEA relevance)

THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EU-

Having regard to the Treaty establishing the European Com-

Having regard to the proposal from the Commission (1),

Having regard to the opinion of the European Economic and
Social Committee (2),

Acting in accordance with the procedure laid down in Article
251 of the Treaty (3) in the light of the joint text approved by
the Conciliation Committee on 9 April 2003,

Whereas:

(1) Developments since the adoption of Directive 94/25/EC
of the European Parliament and of the Council of 16
June 1994 on the approximation of the laws, regulations
and administrative provisions of the Member States
relating to recreational craft (4) have made it necessary to
amend that Directive.

(2) Directive 94/25/EC does not cover personal watercraft,
while since its adoption some Member States have intro-
duced laws, regulations and administrative provisions
concerning such craft.

(3) The propulsion engines on recreational craft and
personal watercraft produce exhaust emissions of carbon
monoxide (CO), hydrocarbons (HC), nitrogen oxides
(NOx), noise emissions and particle emissions which
affect both human health and the environment.

(4) Exhaust emissions produced by the engines of such
recreational craft and personal watercraft and noise
emissions produced by such craft are also not covered
by Directive 94/25/EC.

(5) It is now necessary to integrate environmental protection
requirements into the various Community activities in
order to promote sustainable development. Such provi-
sions, which are already the subject of the Council Reso-

(3) Opinion of the European Parliament of 5 July 2001 (OJ C 65 E,
(OJ C 170 E, 16.7.2002, p. 1) and Decision of the European Parlia-
ment of 26 September 2002 (not yet published in the Official
Journal). European Parliament Decision of 14 May 2003 and
The provisions on exhaust and noise emissions laid down in this Directive should apply to all engines, whether inboard, outboard or stern drive with or without integral exhaust, and to personal watercraft in order to ensure optimum effectiveness in the protection of human health and the environment. Engines undergoing major modifications should be included as regards exhaust emissions. Craft with stern drive engines without integral exhausts or inboard propulsion engine installations undergoing major craft conversion should be included as regards noise emissions when placed on the Community market within five years following conversion.

Conformity with the essential requirements for emissions from the engines concerned is essential to protect human health and the environment. Maximum authorised levels should be laid down for exhaust emissions of carbon monoxide (CO), hydrocarbons (HC), nitrogen oxide (NOx) and particulate pollutants. As far as noise emissions are concerned, the maximum levels should be broken down as a function of the power of such engines and the number and type of engines on board. These measures should be consistent with all other measures to reduce engine emissions in order to protect human beings and the environment.

Member States should consider introducing national support measures to encourage the use of synthetic biodegradable lubrication oils to reduce water pollution by recreational craft. The introduction of measures at Community level should be considered during the review of this Directive.

For the two types of emission in question, the data certifying their conformity should always accompany the recreational craft, personal watercraft or engine.

Harmonised European standards, in particular as regards the measurement of levels and test methods, make it easier to demonstrate conformity with the essential requirements, also in the case of emissions from the recreational craft and personal watercraft covered by this Directive.

In view of the nature of the risks involved, it is necessary to adopt conformity assessment procedures to ensure the necessary level of protection. The manufacturer or his authorised representative or, if they do not fulfil their obligations, the person placing the product on the market and/or putting it into service, should ensure that the products covered by this Directive comply with relevant essential requirements, when they are placed on the market and/or put into service. Adequate procedures should be laid down which provide a choice between procedures with equivalent stringency. Those procedures should comply with Council Decision 93/465/EEC of 22 July 1993 concerning the modules for the various phases of the conformity assessment procedures and the rules for the affixing and use of the CE conformity marking which are intended to be used in technical harmonisation Directives (4).

As far as exhaust emissions are concerned, all types of engines, including personal watercraft and other similar powered craft, should bear the CE mark affixed by the manufacturer or his authorised representative within the Community, except inboard engines and stern drive engines without integral exhaust, engines type-approved according to stage II of Directive 97/68/EC (5) and engines type-approved according to Directive 88/77/EEC (6) which should be accompanied by the manufacturer’s declaration of conformity. As far as noise emissions are concerned, only outboard engines and stern drive engines with integral exhaust must bear the CE mark affixed by the manufacturer or his authorised representative or the person placing the product on the market and/or putting it into service within the Community. For noise emissions and for all types of engines, except outboard engines and of stern drive engines with integral exhaust, the CE mark affixed on the craft demonstrates conformity with the relevant essential requirements.

Directive 94/25/EC should be amended also to take account of manufacturing needs, which require a greater choice of certification procedures.

For the sake of legal certainty and to ensure the safe use of recreational craft, it is necessary to clarify a number of technical issues relating to the essential construction requirements of recreational craft concerning the boat design categories, the maximum recommended load, the craft identification number, the fuel tanks, the fire fighting equipment and the discharge prevention.

The Commission should closely monitor the evolution of engine technology and the need to meet future environmental protection requirements in order to examine the possibility of further reducing emission limit values for noise and exhaust emissions.

In order to facilitate the application of measures concerning the efficient functioning of legislation, the procedure establishing a close cooperation between the Commission and Member States in the framework of a Committee should be maintained and reinforced.

The measures necessary for the implementation of this Directive should be adopted in accordance with Council Decision 1999/468/EC of 28 June 1999 laying down the procedures for the exercise of implementing powers conferred on the Commission (1).

It is necessary to provide for a transitional arrangement enabling certain products complying with the national rules in force on the date of entry into force of this Directive to be placed on the market and/or put into service.

HAVE ADOPTED THIS DIRECTIVE:

Article 1

Directive 94/25/EC is hereby amended as follows:

1. Article 1 shall be replaced by the following:

‘Article 1

Scope and definitions

1. This Directive shall apply:

(a) with regard to design and construction, to:

(i) recreational craft and partly completed boats;
(ii) personal watercraft;
(iii) components referred to in Annex II when placed on the Community market separately and when intended for installation;

(b) with regard to exhaust emissions, to:

(i) propulsion engines which are installed or specifically intended for installation on or in recreational craft and personal watercraft;
(ii) propulsion engines installed on or in these craft that are subject to a “major engine modification”;

(c) with regard to noise emissions, to:

(i) recreational craft with stern drive engines without integral exhausts or inboard propulsion engine installations;
(ii) recreational craft with stern drive engines without integral exhausts or with inboard propulsion installations which are subject to a major craft conversion and subsequently placed on the Community market within five years following conversion;

(iii) personal watercraft;

(iv) outboard engines and stern drive engines with integral exhausts intended for installation on recreational craft;

(d) for products falling under (a)(ii), (b) and (c), the provisions of this Directive shall only apply from the first placing on the market and/or putting into service after the date of entry into force of this Directive.

2. The following shall be excluded from the scope of this Directive:

(a) with regard to paragraph 1(a):

(i) craft intended solely for racing, including rowing racing boats and training rowing boats, labelled as such by the manufacturer;
(ii) canoes and kayaks, gondolas and pedalos;
(iii) sailing surfboards;

(iv) surfboards, including powered surfboards;

(v) original historical craft and individual replicas thereof designed before 1950, built predominantly with the original materials and labelled as such by the manufacturer;

(vi) experimental craft, provided that they are not subsequently placed on the Community market;

(vii) craft built for own use, provided that they are not subsequently placed on the Community market during a period of five years;

(viii) craft specifically intended to be crewed and to carry passengers for commercial purposes, without prejudice to paragraph 3(a), in particular those defined in Council Directive 82/714/EEC of 4 October 1982 laying down technical requirements for inland waterway vessels (2), regardless of the number of passengers;

(ix) submersibles;

(x) air cushion vehicles;

(xi) hydrofoils;

(xii) External combustion steam powered craft, fuelled by coal, coke, wood, oil or gas;

(b) with regard to paragraph 1(b):

(i) propulsion engines installed or specifically intended for installation on the following:

— craft intended solely for racing and labelled as such by the manufacturer;

(ii) personal watercraft;

(iii) outboard engines and stern drive engines with integral exhausts intended for installation on recreational craft;

(d) for products falling under (a)(ii), (b) and (c), the provisions of this Directive shall only apply from the first placing on the market and/or putting into service after the date of entry into force of this Directive.


— experimental craft, provided that they are not subsequently placed on the Community market,
— craft specifically intended to be crewed and to carry passengers for commercial purposes, without prejudice to paragraph 3(a), in particular those defined in Directive 82/714/EEC, regardless of the number of passengers,
— submersibles,
— air cushion vehicles,
— hydrofoils;
(ii) original and individual replicas of historical propulsion engines, which are based on a pre-1950 design, not produced in series and fitted on craft referred to in paragraph 2(a)(v) and (vii);
(iii) propulsion engines built for own use provided that they are not subsequently placed on the Community market during a period of five years;
(c) with regard to paragraph 1(c):
— all craft referred to in point (b) of this paragraph,
— craft built for own use, provided that they are not subsequently placed on the Community market during a period of five years.

3. For the purposes of this Directive the following definitions shall apply:
(a) “recreational craft”: any boat of any type intended for sports and leisure purposes of hull length from 2,5 m to 24 m, measured according to the harmonised standard, regardless of the means of propulsion; the fact that the same boat could be used for charter or for recreational boating training shall not prevent it being covered by this Directive when it is placed on the Community market for recreational purposes;
(b) “personal watercraft”: a vessel less than 4 m in length which uses an internal combustion engine having a water jet pump as its primary source of propulsion and designed to be operated by a person or persons sitting, standing or kneeling on, rather than within the confines of, a hull;
(c) “propulsion engine”: any spark or compression ignition, internal combustion engine used for propulsion purposes, including two-stroke and four-stroke inboard, stern-drive with or without integral exhaust and outboard engines;
(d) “major engine modification”: the modification of an engine which:
— could potentially cause the engine to exceed the emission limits set out in Annex I.B. excluding routine replacement of engine components that do not alter the emission characteristics, or
— increases the rated power of the engine by more than 15 %;
(e) “major craft conversion”: a conversion of a craft which:
— changes the means of propulsion of the craft,
— involves a major engine modification,
— alters the craft to such an extent that it is considered a new craft;
(f) “means of propulsion”: the mechanical method by which the craft is driven, in particular marine propellers or waterjet mechanical drive systems;
(g) “engine family”: the manufacturer’s grouping of engines which, through their design, are expected to have similar exhaust emission characteristics and which comply with the exhaust emissions requirements of this Directive;
(h) “manufacturer”: any natural or legal person who designs and manufactures a product covered by this Directive or who has such a product designed and/or manufactured with a view to placing it on the market on his own behalf;
(i) “authorised representative”: any natural or legal person established in the Community who has received a written mandate from the manufacturer to act on his behalf with regard to the latter’s obligation under this Directive.

2. Article 4 shall be replaced by the following:

‘Article 4

Free movement of the products referred to in Article 1(1)

1. Member States shall not prohibit, restrict or impede the placing on the market and/or putting into service in their territory of products referred to in Article 1(1) bearing the CE marking referred to in Annex IV, which indicates their conformity with all the provisions of this Directive, including the conformity procedures set out in Chapter II.

2. Member States shall not prohibit, restrict or impede the placing on the market of partly-completed boats where the builder or his authorised representative established in the Community or the person responsible for the placing on the market declares, in accordance with Annex IIIa, that they are intended to be completed by others.

3. Member States shall not prohibit, restrict or impede the placing on the market and/or putting into service of components referred to in Annex II and bearing the CE marking referred to in Annex IV which indicates their conformity with the relevant essential requirements where these components are accompanied by a written declaration of conformity as provided for in Annex XV and are intended to be incorporated into recreational craft, in accordance with the declaration, referred to in Annex IIIb, of the manufacturer, his authorised representative established in the Community or, in the case of imports from a third country, of any person who places those components on the Community market.
4. Member States shall not prohibit, restrict or impede the placing on the market and/or putting into service of:

— inboard engines and stern drive propulsion engines without integral exhaust,

— engines type-approved according to Directive 97/68/EC (*) which are in compliance with stage II provided for in section 4.2.3 of Annex I to that Directive and of,

— engines type-approved according to Directive 88/77/EEC (**);

where the manufacturer or his authorised representative established in the Community declares in accordance with Annex XV.3 that the engine will meet the exhaust emission requirements of this Directive, when installed in a recreational craft or personal watercraft in accordance with the manufacturer's supplied instructions.

5. At trade fairs, exhibitions, demonstrations, etc., Member States shall not create any obstacles to the showing of the products referred to in Article 1(1) which do not comply with this Directive, provided that a visible sign clearly indicates that such products may not be marketed or put into service until they have been made to comply.

6. Where the products referred to in Article 1(1) are subject to other Directives covering other aspects and which provide for the affixing of the CE marking, the latter shall indicate that such products are also presumed to conform to the provisions of those other Directives. The CE marking shall indicate conformity with the applicable Directives or relevant parts thereof. In this case, the particulars of the said Directives applied by the manufacturer, as published in the Official Journal of the European Union, must be given in the documents, declaration of conformity or instructions required by the Directives and accompanying such products.


2. With regard to design and construction of products referred to in Article 1(1)(a), the boat manufacturer or his authorised representative established in the Community shall apply the following procedures for boat design categories A, B, C and D as referred to in section 1 of Annex I.A:

(a) for categories A and B:

(i) for boats from 2,5 m to 12 m hull length: the internal production control plus tests (module Aa) referred to in Annex VI, or the EC type-examination (module B) as described in Annex VII, supplemented by conformity to type (module C) referred to in Annex VIII, or any of the following modules: B+D, or B+E, or B+F, or G or H;

(ii) for boats from 12 m to 24 m hull length: the EC type-examination (module B) referred to in Annex VII supplemented by conformity to type (module C) referred to in Annex VIII, or any of the following modules: B+D, or B+E, or B+F, or G or H;

(b) for category C:

(i) for boats from 2,5 m to 12 m hull length:

— where the harmonised standards relating to Sections 3.2 and 3.3 of Annex I.A are complied with: the internal production control (module A), referred to in Annex V, or internal production control plus tests (module Aa) referred to in Annex VI, or the EC type-examination (module B) as described in Annex VII, supplemented by conformity to type (module C) referred to in Annex VIII, or any of the following modules: B+D, or B+E, or B+F, or G or H,

— where the harmonised standards relating to Sections 3.2 and 3.3 of Annex I.A are not complied with: the internal production control plus tests (module Aa) referred to in Annex VI, or the EC type-examination (module B) as described in Annex VII, supplemented by conformity to type (module C) referred to in Annex VIII, or any of the following modules: B+D, or B+E, or B+F, or G, or H;

(ii) for boats from 12 m to 24 m hull length: the EC type-examination (module B) referred to in Annex VII followed by conformity to type (module C) referred to in Annex VIII, or any of the following modules: B+D, or B+E, or B+F, or G or H;

(c) for category D:

for boats from 2,5 m to 24 m hull length: the internal production control (module A) referred to in Annex V, or the internal production control plus tests (module Aa) referred to in Annex VI, or the EC type-examination (module B) as described in Annex VII, supplemented by conformity to type (module C) referred to in Annex VIII, or any of the following modules: B+D, or B+E, or B+F or G or H;

(d) for personal watercraft:

the internal production control (module A) referred to in Annex V, or the internal production control plus tests (module Aa) referred to in Annex VI, or the EC type-examination (module B) as described in Annex VII, supplemented by conformity to type (module C) referred to in Annex VIII, or any of the following modules: B+D, or B+E, or B+F, or G or H;

(e) for components referred to in Annex II: any of the following modules: B+C, or B+D, or B+F, or G or H.

3. With regard to exhaust emissions:

for products referred to in Article 1(1)(b), the engine manufacturer or his authorised representative established in the Community shall apply the EC type-examination (module B) as described in Annex VII followed by conformity to type (module C) referred to in Annex VIII, or any of the following modules: B+D, or B+E, or B+F, or G or H.

4. With regard to noise emissions:

(a) for products referred to in Article 1(1)(c)(i) and (ii), the boat manufacturer or his authorised representative established in the Community shall apply:

(i) where tests are conducted using the harmonised standard (*) for noise measurement: either internal production control plus tests (module Aa) referred to in Annex VI, or unit verification (module G) referred to in Annex XI, or full quality assurance (module H) referred to in Annex XII;

(*) EN ISO 14509.
(ii) where the Froude number and power displacement ratio method is used for assessment: either
the internal production control (module A) referred to in Annex V, or the internal production
control plus tests (module Aa) referred to in Annex VI, or unit verification (module G) referred
to in Annex XI, or full quality assurance (module H) referred to in Annex XII;

(iii) where certified reference boat data, established in accordance with point (i), is used for assess-
ment: either internal production control (module A) referred to in Annex V, or internal
production control plus supplementary requirements (module Aa) referred to in Annex VI, or
unit verification (module G) referred to in Annex XI, or full quality assurance (module H)
referred to in Annex XII;

(b) for products referred to in Article 1(1)(c)(iii) and (iv), the personal watercraft/engine manufacturer
or his authorised representative established in the Community shall apply: internal production
control plus supplementary requirements referred to in Annex VI (module Aa) or module G or H.

7. Article 10(1), (2) and (3) shall be replaced by the following:

1. When the following products are placed on the market, they shall bear the CE marking of
conformity:

(a) recreational craft, personal watercraft and components referred to in Annex II, which are regarded
as meeting the corresponding essential requirements set out in Annex I;

(b) outboard engines which are regarded as meeting the essential requirements set out in Annex I.B
and I.C.;

(c) stern drive engines with integral exhaust which are regarded as meeting the essential requirements
set out in Annex I.B. and I.C.

2. The CE marking of conformity, as shown in Annex IV, must appear in a visible, legible and
indelible form on the craft and the personal watercraft as in point 2.2 of Annex I.A, on components,
as referred to in Annex II and/or on their packaging, and on outboard engines and stern drive engines
with integral exhaust as in point 1.1 of Annex I.B.

The CE marking shall be accompanied by the identification number of the body responsible for imple-
mentation of the procedures set out in Annexes IX, X, XI, XII, and XVI.

3. The affixing of markings or inscriptions on products covered by this Directive which are likely
to mislead third parties with regard to the meaning or the form of the CE marking shall be prohibited.
Any other markings may be affixed to products covered by this Directive and/or on their packaging
provided that the visibility and legibility of the CE marking is not thereby reduced.

8. Annex I is hereby amended as follows:

1. the heading shall be replaced by the following:

‘ANNEX I

ESSENTIAL REQUIREMENTS

PRELIMINARY OBSERVATION

For the purposes of this Annex the term “craft” shall cover recreational craft and personal water-
craft.

A. Essential safety requirements for the design and construction of craft.’;

2. the table under ‘1. BOAT DESIGN CATEGORIES’ shall be replaced by the following:

<table>
<thead>
<tr>
<th>Design category</th>
<th>Wind force (Beaufort scale)</th>
<th>Significant wave height (H1/3, metres)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A - “Ocean”</td>
<td>exceeding 8</td>
<td>exceeding 4</td>
</tr>
<tr>
<td>B - “Offshore”</td>
<td>up to, and including, 8</td>
<td>up to, and including, 4</td>
</tr>
<tr>
<td>C - “Inshore”</td>
<td>up to, and including, 6</td>
<td>up to, and including, 2</td>
</tr>
<tr>
<td>D - “Sheltered waters”</td>
<td>up to, and including, 4</td>
<td>up to, and including, 0.3</td>
</tr>
</tbody>
</table>
3. The definition of Boat Design Category A shall be replaced by the following:

‘A. Ocean: Designed for extended voyages where conditions may exceed wind force 8 (Beaufort scale) and significant wave heights of 4m and above but excluding abnormal conditions, and vessels largely self-sufficient.’;

4. The definition of Boat Design Category D shall be replaced by the following:

‘D. Sheltered waters — Designed for voyages on sheltered coastal waters, small bays, small lakes, rivers and canals when conditions up to, and including, wind force 4 and significant wave heights up to, and including, 0,3m may be experienced, with occasional waves of 0,5m maximum height, for example from passing vessels.’;

5. The last subparagraph under section 1. ‘Boat design categories’ shall be replaced by the following:

‘Craft in each Category must be designed and constructed to withstand these parameters in respect of stability, buoyancy, and other relevant essential requirements listed in Annex I, and to have good handling characteristics.’;

6. The text under section 2. ‘General requirements’ shall be replaced by the following:

‘Products falling under Article 1(1)(a) shall comply with the essential requirements in so far as they apply to them.’;

7. In section 2.1:
   (a) the title should read as follows: ‘Craft identification’;
   (b) the introductory wording shall read as follows:
       ‘Each craft shall be marked with an identification number including the following information:’;

8. In section 2.2 ‘Builder’s plate’, the fourth indent shall read as follows:

   ‘— manufacturer’s maximum recommended load derived from section 3.6 excluding the weight of the contents of the fixed tanks when full’;

9. In section 3.6 ‘Manufacturer’s maximum recommended load’ the following words shall be deleted:

   ‘..., as marked on the builder’s plate,...’;

10. The following section shall be added in section 5 ‘Installation requirements’:

    ‘5.1.5. Personal watercraft running without driver.

    Personal watercraft shall be designed either with an automatic engine cut-off or with an automatic device to provide reduced speed, circular, forward movement when the driver dismounts deliberately or falls overboard.’;

11. Section 5.2.2 shall be replaced by the following:

    ‘5.2.2. Fuel tanks

    Fuel tanks, lines and hoses shall be secured and separated or protected from any source of significant heat. The material the tanks are made of and their method of construction shall be according to their capacity and the type of fuel. All tank spaces shall be ventilated.

    Petrol fuel shall be kept in tanks which do not form part of the hull and are:
    (a) insulated from the engine compartment and from all other source of ignition;
    (b) separated from living quarters;

    Diesel fuel may be kept in tanks that are integral with the hull.’;
12. section 5.6.2 shall be replaced by the following:

‘5.6.2. Fire-fighting equipment

Craft shall be supplied with fire-fighting equipment appropriate to the fire hazard, or the position and capacity of fire-fighting equipment appropriate to the fire hazard shall be indicated. The craft shall not be put into service until the appropriate fire-fighting equipment is in place. Petrol engine enclosures shall be protected by a fire extinguishing system that avoids the need to open the enclosure in the event of fire. Where fitted, portable fire extinguishers shall be readily accessible and one shall be so positioned that it can easily be reached from the main steering position of the craft.’

13. section 5.8 shall be replaced by the following:

‘5.8. Discharge prevention and installations facilitating the delivery ashore of waste

Craft shall be constructed so as to prevent the accidental discharge of pollutants (oil, fuel, etc.) overboard.

Craft fitted with toilets shall have either:
(a) holding tanks, or
(b) provision to fit holding tanks.

Craft with permanently installed holding tanks shall be fitted with a standard discharge connection to enable pipes of reception facilities to be connected with the craft discharge pipeline.

In addition, any through-the-hull pipes for human waste shall be fitted with valves which are capable of being secured in the closed position.’

14. the following parts shall be added:

‘B. Essential requirements for exhaust emissions from propulsion engines

Propulsion engines shall comply with the following essential requirements for exhaust emissions.

1. Engine identification

1.1. Each engine shall be clearly marked with the following information:
— engine manufacturer’s trademark or trade-name,
— engine type, engine family, if applicable,
— a unique engine identification number,
— CE marking, if required under Article 10.

1.2. These marks must be durable for the normal life of the engine and must be clearly legible and indelible. If labels or plates are used, they must be attached in such a manner that the fixing is durable for the normal life of the engine, and the labels/plates cannot be removed without destroying or defacing them.

1.3. These marks must be secured to an engine part necessary for normal engine operation and not normally requiring replacement during the engine life.

1.4. These marks must be located so as to be readily visible to the average person after the engine has been assembled with all the components necessary for engine operation.

2. Exhaust emission requirements

Propulsion engines shall be designed, constructed and assembled so that when correctly installed and in normal use, emissions shall not exceed the limit values obtained from the following table:
Table 1

<table>
<thead>
<tr>
<th>Type</th>
<th>Carbon monoxide CO = A + B/Pn</th>
<th>Hydrocarbons HC = A + B/Pn</th>
<th>Nitrogen oxides NOx = A + B/Pn</th>
<th>Particulates PT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Two-stroke spark ignition</td>
<td>150.0</td>
<td>600.0</td>
<td>1.0</td>
<td>10.0</td>
</tr>
<tr>
<td>Four-stroke spark ignition</td>
<td>150.0</td>
<td>600.0</td>
<td>1.0</td>
<td>15.0</td>
</tr>
<tr>
<td>Compression ignition</td>
<td>5.0</td>
<td>0</td>
<td>0</td>
<td>9.8</td>
</tr>
</tbody>
</table>

Where A, B and n are constants in accordance with the table, Pn is the rated engine power in kW and the exhaust emissions are measured in accordance with the harmonised standard (*).

For engines above 130 kW either E3 (IMO) or E5 (recreational marine) duty cycles may be used.

The reference fuels to be used for the emissions test for engines fuelled with petrol and diesel shall be as specified in Directive 98/69/EC (Annex IX, Tables 1 and 2), and for those engines fuelled with Liquefied Petroleum Gas as specified in Directive 98/77/EC.

3. **Durability**

The manufacturer of the engine shall supply engine installation and maintenance instructions, which if applied should mean that the engine in normal use will continue to comply with the above limits throughout the normal life of the engine and under normal conditions of use.

This information shall be obtained by the engine manufacturer by use of prior endurance testing, based on normal operating cycles, and by calculation of component fatigue so that the necessary maintenance instructions may be prepared by the manufacturer and issued with all new engines when first placed on the market.

The normal life of the engine is considered to mean:
(a) inboard or stern drive engines with or without integral exhaust: 480 hours or 10 years, whichever occurs first;
(b) personal watercraft engines: 350 hours or five years, whichever occurs first;
(c) outboard engines: 350 hours or 10 years, whichever occurs first.

4. **Owner’s manual**

Each engine shall be provided with an owner’s manual in the Community language or languages, which may be determined by the Member State in which the engine is to be marketed. This manual shall:
(a) provide instructions for the installation and maintenance needed to assure the proper functioning of the engine to meet the requirements of paragraph 3, (Durability);
(b) specify the power of the engine when measured in accordance with the harmonised standard.

(*) EN ISO 8178-1: 1996.
C. Essential requirements for noise emissions

Recreational craft with inboard or stern drive engines without integral exhaust, personal watercraft and outboard engines and stern drive engines with integral exhaust shall comply with the following essential requirements for noise emissions.

1. Noise emission levels

1.1. Recreational craft with inboard or stern drive engines without integral exhaust, personal watercraft and outboard engines and stern drive engines with integral exhaust shall be designed, constructed and assembled so that noise emissions measured in accordance with tests defined in the harmonised standard (***) shall not exceed the limit values in the following table:

<table>
<thead>
<tr>
<th>Single engine power in kW</th>
<th>Maximum Sound Pressure Level $L_{\text{pASmax}}$ in dB</th>
</tr>
</thead>
<tbody>
<tr>
<td>$P_N \leq 10$</td>
<td>67</td>
</tr>
<tr>
<td>$10 &lt; P_N \leq 40$</td>
<td>72</td>
</tr>
<tr>
<td>$P_N &gt; 40$</td>
<td>75</td>
</tr>
</tbody>
</table>

where $P_N = \text{rated engine power in kW at rated speed}$ and $L_{\text{pASmax}} = \text{maximum sound pressure level in dB}$.

(***) EN ISO 14509.

For twin-engine and multiple-engine units of all engine types an allowance of 3 dB may be applied.

1.2. As an alternative to sound measurement tests, recreational craft with inboard engine configuration or stern drive engine configuration, without integral exhaust, shall be deemed to comply with these noise requirements if they have a Froude number of $\leq 1,1$ and a power displacement ratio of $\leq 40$ and where the engine and exhaust system are installed in accordance with the engine manufacturer’s specifications.

1.3. “Froude number” shall be calculated by dividing the maximum boat speed $V$ (m/s) by the square root of the waterline length $l_{\text{wl}}$ (m) multiplied by a given gravitational constant, ($g = 9.8$ m/s$^2$)

$$F_n = \frac{V}{\sqrt{(g \cdot l_{\text{wl}})}}.$$  

“Power displacement ratio” shall be calculated by dividing the engine power $P$ (kW) by the boat’s displacement $D$ (t) = $\frac{P}{D}$

1.4. As a further alternative to sound measurement tests, recreational craft with inboard or stern drive engine configurations without integral exhaust, shall be deemed to comply with these noise requirements if their key design parameters are the same as or compatible with those of a certified reference boat to tolerances specified in the harmonised standard.

1.5. “Certified reference boat” shall mean a specific combination of hull/inboard engine or stern drive engine without integral exhaust that has been found to comply with the noise emission requirements, when measured in accordance with section 1.1, and for which all appropriate key design parameters and sound level measurements have been included subsequently in the published list of certified reference boats.
2. **Owner’s Manual**

For recreational craft with inboard engine or stern drive engines with or without integral exhaust and personal watercraft, the owner’s manual required under Annex IA Section 2.5, shall include information necessary to maintain the craft and exhaust system in a condition that, insofar as is practicable, will ensure compliance with the specified noise limit values when in normal use.

For outboard engines, the owner’s manual required under Annex IB.4 shall provide instructions necessary to maintain the outboard engine in a condition, that insofar as is practicable, will ensure compliance with the specified noise limit values when in normal use.

9. Section 4 of Annex II shall read as follows:

‘4. Fuel tanks intended for fixed installations and fuel hoses.’;

10. Annex VI shall be replaced by the following:

**‘ANNEX VI**

**INTERNAL PRODUCTION CONTROL PLUS TESTS (Module Aa, option 1)**

This module consists of module A, as referred to in Annex V, plus the following supplementary requirements:

A. **Design and construction**

On one or several boats representing the production of the manufacturer one or more of the following tests, equivalent calculation or control shall be carried out by the manufacturer or on his behalf:

(a) test of stability according to section 3.2 of the Essential Requirements (Annex IA);

(b) test of buoyancy characteristics according to section 3.3 of the Essential Requirements (Annex IA).

Provisions common to both variations:

These tests or calculations or control shall be carried out under the responsibility of a notified body chosen by the manufacturer.

B. **Noise emissions**

For recreational craft fitted with inboard or stern drive engines without integral exhaust and for personal watercraft:

On one or several craft representing the production of the craft manufacturer, the sound emission tests defined in Annex IC shall be carried out by the craft manufacturer, or on his behalf, under the responsibility of a notified body chosen by the manufacturer.

For outboard engines and stern drive engines with integral exhaust:

On one or several engines of each engine family representing the production of the engine manufacturer, the sound emission tests defined in Annex IC shall be carried out by the engine manufacturer, or on his behalf, under the responsibility of a notified body chosen by the manufacturer.

Where more than one engine of an engine family is tested, the statistical method described in Annex XVII shall be applied to ensure conformity of the sample.’;
11. the following point shall be added to Annex VIII:

‘4. With regard to the assessment of conformity with the exhaust emission requirements of this Directive and if the manufacturer is not working under a relevant quality system as described in Annex XII, a notified body chosen by the manufacturer may carry out or have carried out product checks at random intervals. When the quality level appears unsatisfactory or when it seems necessary to verify the validity of the data presented by the manufacturer, the following procedure shall be used:

An engine is taken from the series and subjected to the test described in Annex I.B. Test engines shall have been run in, partially or completely, according to the manufacturer's specifications. If the specific exhaust emissions of the engine taken from the series exceed the limit values according to Annex I.B, the manufacturer may ask for measurements to be done on a sample of engines taken from the series and including the engine originally taken. To ensure the conformity of the sample of engines defined above with the requirements of the Directive, the statistical method described in Annex XVII shall be applied.’;

12. the following subparagraph shall be added to section 5.3 in Annex X:

‘For the assessment of conformity with the exhaust emission requirements, the procedure defined in Annex XVII shall be applied.’;

13. Annex XIII shall be replaced by the following:

‘ANNEX XIII

TECHNICAL DOCUMENTATION SUPPLIED BY THE MANUFACTURER

The technical documentation referred to in Annexes V, VII, VIII, IX, XI and XVI must comprise all relevant data or means used by the manufacturer to ensure that components or craft comply with the essential requirements relating to them.

The technical documentation shall enable understanding of the design, manufacture and operation of the product, and shall enable assessment of conformity with the requirements of this Directive.

The documentation shall contain so far as relevant for assessment:

(a) a general description of the type,

(b) conceptual design and manufacturing drawings and schemes of components, sub-assemblies, circuits, etc.,

(c) descriptions and explanations necessary for the understanding of said drawings and schemes and the operation of the product,

(d) a list of the standards referred to in Article 5, applied in full or in part, and descriptions of the solutions adopted to fulfil the essential requirements when the standards referred to in Article 5 have not been applied,

(e) results of design calculations made, examinations carried out, etc.,

(f) test reports, or calculations namely on stability according to section 3.2 of the Essential Requirements and on buoyancy according to section 3.3 thereof (Annex I.A),

(g) exhaust emissions test reports demonstrating compliance with section 2 of the Essential Requirements (Annex I.B),

(h) sound emissions test reports or reference boat data demonstrating compliance with section 1 of the Essential Requirements (Annex I.C).’;

14. point 1 of Annex XIV shall be replaced by the following:

‘1. The body, its director and the staff responsible for carrying out the verification tests shall not be the designer, manufacturer, supplier or installer of the products referred to in Article 1 which they inspect, nor the authorised representative of any of these parties. They shall not become either involved directly or as authorised representatives in the design, construction, marketing or maintenance of the said products. This does not preclude the possibility of exchanges of technical information between the manufacturer and the body.'
1a. A notified body must be independent and must not be controlled by the manufacturers or by suppliers.

15. Annex XV shall be replaced by the following:

‘ANNEX XV

WRITTEN DECLARATION OF CONFORMITY

1. The written declaration of conformity to the provisions of the Directive must always accompany:
   (a) the recreational craft and the personal watercraft and must be included with the owner’s manual (Annex I.A section 2.5),
   (b) the components, as referred to in Annex II,
   (c) propulsion engines and must be included with the owner’s manual (Annex I.B.4).

2. The written declaration of conformity shall include the following (*):
   (a) name and address of the manufacturer or his authorised representative established in the Community (**),
   (b) description of the product defined in point 1 (***)
   (c) references to the relevant harmonised standards used, or references to the specifications in relation to which conformity is declared,
   (d) where appropriate, the references of the other Community Directives applied,
   (e) where appropriate, reference to the EC type-examination certificate issued by a notified body,
   (f) where appropriate, the name and address of the notified body,
   (g) identification of the person empowered to sign on behalf of the manufacturer or his authorised representative established within the Community.

3. With regard to:
   — inboard engines and stern drive propulsion engines without integral exhaust,
   — engines type-approved according to Directive 97/68/EC which are in compliance with stage II provided for in section 4.2.3 of Annex I of the latter Directive and,
   — engines type-approved according to Directive 88/77/EEC,

the declaration of conformity shall include in addition to the information of point 2, a statement of the manufacturer that the engine will meet the exhaust emission requirements of this Directive, when installed in a recreational craft, in accordance with the manufacturer’s supplied instructions and that this engine must not be put into service until the recreational craft into which it is to be installed has been declared in conformity, if so required, with the relevant provision of the Directive;

(*) Must be drawn up in the language(s) as provided for under section 2.5 of Annex I.A.
(**) Business name and full address; the authorised representative must also give the business name and address of the manufacturer.
(***) Description of the product make, type, serial number, where appropriate.’

16. the following Annexes shall be added:

‘ANNEX XVI

PRODUCT QUALITY ASSURANCE (MODULE E)

1. This module describes the procedure whereby the manufacturer who satisfies the obligations of point 2 ensures and declares that the products concerned are in conformity with the type as described in the EC type-examination certificate and satisfy the requirements of the directive that apply to them. The manufacturer or his authorised representative established within the Community must affix the CE mark to each product and draw up a written declaration of conformity. The CE mark must be accompanied by the identification symbol of the notified body responsible for surveillance as specified in point 4.
2. The manufacturer must operate an approved quality system for final product inspection and testing as specified in point 3 and must be subject to surveillance as specified in point 4.

3. Quality system

3.1. The manufacturer must lodge an application for assessment of his quality system for the products concerned, with a notified body of his choice.

The application must include:
— all relevant information for the product category envisaged,
— the quality system’s documentation,
— if applicable, the technical documentation of the approved type and a copy of the EC type-examination certificate.

3.2. Under the quality system, each product must be examined and appropriate tests as set out in the relevant standard(s) referred to in Article 5 or equivalent tests shall be carried out in order to ensure its conformity with the relevant requirements of the directive. All the elements, requirements and provisions adopted by the manufacturer must be documented in a systematic and orderly manner in the form of written policies, procedures and instructions. This quality system documentation must ensure a common understanding of the quality programmes, plans, manuals and records.

It must contain in particular an adequate description of:
— the quality objectives and the organisational structure, responsibilities and powers of the management with regard to product quality,
— the examinations and tests that will be carried out after manufacture,
— the means to monitor the effective operation of the quality system,
— quality records, such as inspection reports and test data, calibration data, qualification reports of the personnel concerned, etc.

3.3. The notified body must assess the quality system to determine whether it satisfies the requirements referred to in point 3.2.

It presumes conformity with these requirements in respect of quality systems that implement the relevant harmonised standard.

The auditing team must have at least one member experienced as an assessor in the product technology concerned. The assessment procedure must include an assessment visit to the manufacturer’s premises.

The decision must be notified to the manufacturer. The notification must contain the conclusions of the examination and the reasoned assessment decision.

3.4. The manufacturer must undertake to fulfil the obligations arising from the quality system as approved and to maintain it in an appropriate and efficient manner.

The manufacturer or his authorised representative must keep the notified body which has approved the quality system informed of any intended updating of the quality system.

The notified body must evaluate the modifications proposed and decide whether the modified quality system will still satisfy the requirements referred to in point 3.2 or whether a reassessment is required.

It must notify its decision to the manufacturer. The notification must contain the conclusions of the examination and the reasoned assessment decision.

4. Surveillance under the responsibility of the notified body

4.1. The purpose of surveillance is to make sure that the manufacturer duly fulfils the obligations arising out of the approved quality system.
4.2. The manufacturer must allow the notified body entrance for inspection purposes to the locations of inspection, testing and storage and shall provide it with all necessary information, in particular:
   — the quality system documentation,
   — the technical documentation,
   — the quality records, such as inspection reports and test data, calibration data, qualification reports of the personnel concerned, etc.

4.3. The notified body must periodically carry out audits to ensure that the manufacturer maintains and applies the quality system and must provide an audit report to the manufacturer.

4.4. Additionally, the notified body may pay unexpected visits to the manufacturer. At the time of such visits, the notified body may carry out tests or have them carried out in order to check the proper functioning of the quality system where necessary; it must provide the manufacturer with a visit report and, if a test has been carried out, with a test report.

5. The manufacturer must, for a period ending at least 10 years after the last product has been manufactured, keep at the disposal of the national authorities:
   — the documentation referred to in the third indent of the second subparagraph of point 3.1,
   — the updating referred to in the second subparagraph of point 3.4,
   — the decisions and reports from the notified body which are referred to in the final subparagraph of point 3.4, points 4.3 and 4.4.

6. Each notified body must forward to the other notified bodies the relevant information concerning the quality system approvals issued and withdrawn.

ANNEX XVII

CONFORMITY OF PRODUCTION ASSESSMENT FOR EXHAUST AND NOISE EMISSIONS

1. For verifying the conformity of an engine family, a sample of engines is taken from the series. The manufacturer shall decide the size \( n \) of the sample, in agreement with the notified body.

2. The arithmetical mean \( X \) of the results obtained from the sample shall be calculated for each regulated component of the exhaust and noise emission. The production of the series shall be deemed to conform to the requirements (pass decision) if the following condition is met:

\[
X + k \cdot S \leq L
\]

\( S \) is standard deviation, where:

\[
S^2 = \frac{\sum (x - X)^2}{n - 1}
\]

\( X \) = the arithmetical mean of the results

\( x \) = the individual results of the sample

\( L \) = the appropriate limit value

\( n \) = the number of engines in the sample

\( k \) = statistical factor depending on \( n \) (see table)
If $n \geq 20$ then $k = 0.860/\sqrt{n}$. $k = 0.860/\sqrt{n}$.

**Article 2**

By 31 December 2006 the Commission shall submit a report on the possibilities of further improving the environmental characteristics of engines and consider *inter alia* the need to revise the boat design categories. If deemed appropriate, in the light of this report, the Commission shall by 31 December 2007 submit appropriate proposals to the European Parliament and the Council. The Commission shall in the light of the experience gained take account of:

(a) the need to further reduce emissions of air pollutants and noise in order to meet environment protection requirements;
(b) the possible benefits of a system for ‘in-use compliance’;
(c) the availability of cost efficient techniques for controlling emissions;
(d) the need to reduce evaporation and spill of fuel;
(e) the possibility of agreeing on international standards for exhaust and noise emissions;
(f) possible simplifications of the system for conformity assessment procedures.

**Article 3**

1. Member States shall adopt and publish the laws, regulations and administrative provisions necessary to comply with the requirements of this Directive by 30 June 2004. They shall immediately inform the Commission thereof.

Member States shall apply such measures as from 1 January 2005.

2. Member States shall permit the placing on the market and/or putting into service of products which comply with the rules in force in their territory on the date of entry into force of this Directive, as follows:
   (a) until 31 December 2005 for the products falling under Article 1(1)(a);
   (b) until 31 December 2005 for compression ignition and four-stroke spark ignition engines; and,
   (c) until 31 December 2006 for two-stroke spark ignition engines.

3. When Member States adopt the measures referred to in paragraph 1, they shall contain a reference to this Directive or shall be accompanied by such reference on the occasion of their official publication. The methods of making such reference shall be laid down by Member States.

4. Member States shall communicate to the Commission the text of the provisions of national law which they adopt in the field governed by this Directive.

**Article 4**

Member States shall determine the penalties applicable to breaches of the national provisions adopted pursuant to this Directive. The penalties shall be effective, proportionate and dissuasive.

**Article 5**

This Directive shall enter into force on the day of its publication in the *Official Journal of the European Union*. 
Article 6

This Directive is addressed to the Member States.

Done at Luxembourg, 16 June 2003.

For the European Parliament

The President
P. COX

For the Council

The President
G. PAPANDREOU