

**DIRECTIVE 2003/44/EC AMENDING THE
RECREATIONAL CRAFT DIRECTIVE
AND
COMMENTS TO THE DIRECTIVE
COMBINED**

**A guide to the application of Directive 2003/44/EC amending Directive 94/25/EC of
16 June 1994 on the approximation of the laws, regulations and administrative
provisions of the Member States relating to recreational craft.**

First Edition

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FOREWORD

This document is the first edition of the application guide to Directive 2003/44/EC amending Directive 94/25/EC on recreational craft and sets out and comments on the text of Directive 2003/44/EC relating to the amended design and construction requirements and conformity assessment procedures for recreational craft and new provisions for personal watercraft and exhaust and noise emissions.

The main amendments to the design and construction requirements and conformity assessment procedures of Directive 94/25/EC include:

- an extension of its scope to personal watercraft
- an extension of the available conformity assessment modules
- a procedure for post construction assessment
- a revised definition for Boat Design Categories A and D.

To incorporate the new emission requirements, Annex I of the 94/25/EC Directive has been amended by splitting it into three parts (parts A, B and C) covering the essential requirements for design and construction of recreational craft and personal watercraft (Part A), the requirements for exhaust emissions for propulsion engines (Part B) and the requirements for noise emissions for craft/engine combinations (Part C) respectively.

This guide is intended to be a reference document for all parties directly or indirectly involved with the recreational craft, personal watercraft and marine engine industry. It should be read and used as an aid to the application of the Directive 2003/44/EC. It does not, however, substitute for it. It is the intention that it should explain and clarify certain important issues related to the Directive.

The Guide is publicly available, but it is not binding in the same sense as legal acts adopted by the Community. The legally binding provisions are those transposing the Directive into the national legislation of the EU/EEA Member States.

Since Directive 2003/44/EC is amending Directive 94/25/EC, this application guide should be read in conjunction with the guide to the application of Directive 94/25/EC. A list with the provisions of Directive 94/25/EC which have been amended by Directive 2003/44/EC can be found in Appendix 9. This application guide to Directive 2003/44/EC will refer to the guidance provided in the application guide 94/25/EC whenever this is still valid.

This guide has been published by the European Commission and can be downloaded from the Commission's website at the following URL:

http://europa.eu.int/comm/enterprise/maritime/maritime_regulatory/directive_03_44.htm

Since Directive 2003/44/EC and Directive 94/25/EC are "new approach" directives, additional guidance on the principles of the new approach can be found in the Guide to the implementation of directives based on the New Approach and the Global approach.

This guide has been published by the European Commission and can be downloaded from the Commission's website at the following URL:

<http://europa.eu.int/comm/enterprise/newapproach/legislation/guide/legislation.htm>

It should be noted that the text of the Directive speaks of the “Community” or “EU” in the sense of trade area; this should be read to mean both the European Union (EU) and the European Economic Area (EEA).

In addition to this guide to the application of Directive 2003/44/EC and the application guide to Directive 94/25/EC issued by the Commission services, there are the Recreational Craft Sectoral Group (RSG) Guidelines. RSG is the group of notified bodies under the Directive with representatives of industry and users. These RSG guidelines give general guidance to notified bodies and manufacturers, on the uniform technical application and interpretation of the Directive and its amendment and the conformity assessment procedures in particular.

CORPUS OF DIRECTIVE 2003/44/EC

ARTICLE 1, AMENDMENTS TO DIRECTIVE 94/25/EC

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

AMENDMENTS TO ARTICLE 1: SCOPE AND DEFINITIONS

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;

The design and construction requirements for recreational craft and partly completed boats include all the relevant essential requirements of Directive 94/25/EC subject to the amendments of Annex IA of this Directive. New requirements for exhaust emissions of recreational craft propulsion engines and noise emissions of recreational craft are provided by Article 1.1.(b) and 1.1(c) below. Recreational craft are defined in Article 1.3(a) and partly completed boats are described in the application guide to Directive 94/25/EC.

(ii) personal watercraft;

The scope of Directive 94/25/EC is extended to include personal watercraft, which were previously excluded. The design and construction requirements for personal watercraft include all the relevant requirements of Directive 94/25/EC subject to the amendments of Annex I.A of this Directive, which include one new essential requirement for personal watercraft only (Annex I.A, 5.1.5). Requirements for exhaust and noise emissions of personal watercraft are provided by Article 1.1(b) and 1.1(c) below.

The harmonised standard EN ISO 13590 *Personal watercraft – Construction and system installation requirements* has been developed to cover all the design and construction requirements for personal watercraft. The Annex ZA appended to the standard links the clauses of the standard to the relevant essential safety requirements of the Directive. Application of this harmonised standard provides a presumption of conformity with the design and construction requirements for PWC, in accordance with Article 5 of the Directive. Separate harmonised standards apply for exhaust gas and noise emission measurement for personal watercraft – see Article 1.1(b) and 1.1(c) below.

(iii) components referred to in Annex II when placed on the Community market separately and when intended for installation

The wording above for components has been amended to make it clear that the Directive's requirements apply to all components referred to in Annex II when they are placed separately on the Community market as components for recreational craft. An amendment to Annex II for fuel tanks is made in clause 9 of Article 1 of Directive 2003/44/EC.

(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;

The scope of Directive 94/25/EC is extended to include limits on exhaust emissions of propulsion engines installed or intended for installation on recreational craft and personal watercraft. These exhaust emission requirements are limits on the quantities of specified gases that may be expelled through the engine's exhaust system as prescribed in Annex I.B. The exhaust emission requirements therefore apply only to engines, not the complete craft.

The exhaust emission requirements apply only to engines installed for propulsion of the recreational craft or personal watercraft. An engine installed to be used exclusively as an on-board generator, for example, is therefore outside of the scope of this Directive. See also comments on Article 1.3(c) concerning the definition of 'propulsion engines', and on Article 1.1(d) regarding the date of application of the exhaust emission requirements.

(ii) propulsion engines installed on or in these craft that are subject to a "major engine modification";

A 'major engine modification' is defined by Article 1.3(d). Propulsion engines installed in or on recreational craft that are modified to this extent must comply with the exhaust emission requirements of this Directive when they are put into service after modification. See also comments to Article 1.1(d) regarding the date of application of the exhaust emission requirements with regard to major engine modifications. This requirement also applies to propulsion engines of personal watercraft.

(c) with regard to noise emissions, to:

The scope of Directive 94/25/EC is extended to include limits on noise emissions as specified in Annex 1.C. Depending on the craft and/or engine type the noise emission requirements apply to either the craft/engine combination or just the engine as explained below.

(i) recreational craft with stern drive engines without integral exhausts or inboard propulsion engine installations;

For recreational craft with inboard propulsion engines, the noise emission limits apply to the craft with the installed propulsion engine(s) running. Ensuring compliance with the noise limits is the responsibility of the craft builder, not the engine manufacturer. Stern drive engines that do not have integral exhaust systems are treated in the same way as inboard engines, so such engine installations are also the responsibility of the craft builder with regard to noise emissions. See also comments to Article 1.1(d) regarding the date of application of the noise emission requirements.

(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;

A 'major craft conversion' is defined in Article 1.3(e). Recreational craft with inboard propulsion engines, or with stern drive engines without integral exhausts, that are converted to this extent must comply with the noise emission limits if they are placed on the Community market* within five years of the conversion. See also comments to Article 1.1(d) regarding the date of application of the noise emission requirements with regard to major craft conversions.

* For clarification on what is considered to be 'placing on the market' see the application guide to Directive 94/25/EC and the Guide to the implementation of Directives based on the new Approach and Global Approach.

(iii) personal watercraft;

For personal watercraft, the noise emission limits apply to the complete craft when tested according to the harmonised standard – see comments on Annex 1.C. See also comments to Article 1.1(d) regarding the date of application.

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

For outboard engines and stern drive engines with integral exhausts, the noise emission limits apply to the engine only and ensuring compliance with these noise emission limits is the responsibility of the engine manufacturer. The noise emissions of outboard engines are measured with the engines installed on standard craft according to the harmonised standard – see comments on Annex 1.C.

The noise emissions of stern drive engines with integral exhausts are also measured with the engines installed in standard craft according to the harmonised standard (see Annex 1.C). Stern drive engines with integral exhausts are engines designed so that the exhaust gases are expelled through the transmission/drive unit. It is not necessary for the engine supplier to also supply the transmission/drive unit, as long as the engine is certified for compliance with the noise emission limits when used with the specified transmission/drive unit.

Note that the requirement applies only to outboard engines and stern drive engines with integral exhausts that are intended for installation on recreational craft, and therefore such engines that are intended only for use on commercial craft are excluded from the scope of this Directive (for example, outboard engines used only for rescue or patrol 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.

This paragraph specifies that the new requirements for products falling under (a)(ii) (personal watercraft), (b) (with regard to exhaust emissions) and (c) (with regard to noise emissions) apply only to these products from their first placing on the Community market or first putting into service after the date of entry into force of this Directive. The dates by which all products must comply with the provisions of the Directive are stated in Article 3.

It follows from the above paragraph and Article 3 that for:

Personal watercraft

Personal watercraft that are first placed on the market or put into service in the Community prior to 1st January 2005 (date of entry into application of the provisions of Directive 2003/44/EC) are not required to comply with the Directive, even if subsequently placed on the market again as second hand products.

Personal watercraft that are first placed on the market or put into service in the Community on or after the 1st January 2005 (date of entry into application of the provisions of Directive 2003/44/EC) and before or on the 31st December 2005 (end of the transitional period specified in Article 3.2(a) of Directive 2003/44/EC) are not required to comply with the Directive, provided they do comply with the rules that were in force in the Member States on the date of entry into force of the Directive (26.08.2003) where they are placed on the market and/or put into service. They do not need to comply with the Directive if they would subsequently be placed on the market again as second hand products.

Personal watercraft that are placed on the market or put into service in the Community after 31st December 2005 (end of the transitional period specified in Article 3.2(a) of Directive 2003/44/EC) are required to comply with the Directive's requirements with regard to design and construction, even if they are second hand products imported from outside the EEA, unless they have been previously placed on the market or put in service in the EEA. When such PWC are fitted with an engine of the type specified in Article 3.2 (b) of Directive 2003/44/EC (i.e. compression ignition or four-stroke spark ignition engine), they have also to comply with the Directive's requirements with regard to exhaust and noise emissions. When such PWC are fitted with two-stroke spark ignition engines, they have only to comply with the Directive's requirements with regard to exhaust and noise emissions when they are for the first time placed on the market and/or put into service in the Community after the 31st December 2006 (end of the transitional period specified in Article 3.2(c) of Directive 2003/44/EC)

Propulsion engines with regard to exhaust emission requirements

Propulsion engines installed or intended for installation on or in recreational craft or personal watercraft that are first placed on the Community market or put into service prior to 1st January 2005 (date of entry into application of the provisions of Directive 2003/44/EC) or, ultimately either until the 31st December 2005 (end of the transitional period specified in Article 3.2(b) of Directive 2003/44/EC) for compression ignition and four-stroke spark ignition engines or the 31st December 2006 (end of the transitional period specified in Article 3.2(c) of Directive 2003/44/EC) for two-stroke spark ignition engines are not required to comply with the exhaust gas emission requirements, even if subsequently placed on the market again as second hand products or subject to a 'major engine modification' after the relevant date.

Propulsion engines imported into the Community market from third countries after either the 31st December 2005 (end of the transitional period specified in Article 3.2(b) of Directive 2003/44/EC) for compression ignition and four-stroke spark ignition engines or the 31st December 2006 (end of the transitional period specified in Article 3.2(c) of Directive 2003/44/EC) for two-stroke spark ignition engines are required to comply with the exhaust gas emission requirements, even if they are second hand products that were first used prior to these dates, unless they have been previously placed on the market or put in service in the EEA.*

Recreational craft and personal watercraft with regard to noise emissions

Recreational craft or personal watercraft that were first placed on the Community market or put into service prior to 1st January 2005 (date of entry into application of the provisions of Directive 2003/44/EC) or, ultimately until the 31st December 2005 (end of the transitional period specified in Article 3.2(a) of Directive 2003/44/EC) are not required to comply with the sound emission requirements, even if subsequently placed on the market again as second hand products or subject to a 'major craft conversion' after this date.

Recreational craft imported into the Community market from third countries after the 31st December 2005 (end of the transitional period specified in Article 3.2(a) of Directive 2003/44/EC) are required to comply with the sound emission requirements, even if they are second hand products that were first used prior to that date, unless they have been previously placed on the market or put in service in the EEA.*

* For further clarification see the application guide to Directive 94/25/EC, (viii), 'Summary of application of the Directive after 16th June 1998'.

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

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

The following products are excluded from the design and construction requirements of the Directive.

- (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;*

The wording of this provision of Directive 94/25/EC has been amended to clarify that with Directive 2003/44/EC personal watercraft are no longer excluded from the scope of application of the Directive.

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

The amendment to this exclusion is editorial only and the comments on production of replica historic craft in the application guide to Directive 94/25/EC therefore remain applicable.

- (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 (*), 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;*

() OJ L 301, 28.10.1982, p. 1. Directive as amended by the 1994 Act of Accession.*

The exclusion in (xii) is new compared to Directive 94/25/EC. Where a craft uses a steam engine(s) as described above for propulsion the craft is excluded from the scope of the Directive with regard to the design and construction requirements. An external combustion steam engine used for propulsion is excluded from the emission requirements as it is not an internal combustion engine (see Article 1.3(c) for the definition of 'propulsion engine').

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

The following propulsion engines are excluded from the exhaust emission requirements of this Directive.

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

- craft intended solely for racing and labelled as such by the manufacturer,

Engines for propulsion of racing boats are excluded from the exhaust emission requirements of Directive 2003/44/EC provided that the racing boats are marked with a label stating that they are 'intended solely for racing'. Such engines would typically be tuned or otherwise race-prepared for use in competitions for engine-powered racing boats.

- 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;

Propulsion engines of craft of the type defined in the 5 indents above are all excluded from the exhaust emission requirements of the Directive.

(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);

Individual replica engines based on pre-1950 designs are excluded from the exhaust emission requirements provided that they are fitted to historical craft or craft built for own use as defined by Article 1.2(a)(v) and (vii) above. In this context 'individual replicas' may be built one after another and still excluded, provided that they are built to order and not series produced.

Historical engines built prior to 1950 are excluded from the scope of application of the exhaust emission requirements. Note that propulsion engines built after 1950 and first placed on the Community market or put into service before the dates specified in Article 3.2 are also excluded from the exhaust gas emission requirements of the Directive.

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

To qualify for this exclusion from the exhaust emission requirements, an engine 'built for own use' must have been substantially built by the owner and be used exclusively by the owner. An engine that is marinised by the owner or otherwise adapted by modification or replacement of a few parts does not qualify for this exclusion.

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

The following craft are excluded from the noise emission requirements of this Directive.

- *all craft referred to in point (b) of this paragraph,*

Accordingly racing craft, experimental craft and commercial craft that are in accordance with the definitions in point 2.(b) above, and submersibles, air cushion vehicles and hydrofoils are all excluded from the noise emission requirements of this Directive.

- *craft built for own use, provided that they are not subsequently placed on the Community market during a period of five years.*

Craft built for own use are excluded from the noise emission requirements provided that they are not placed on the Community market within 5 years of first being put into service. To qualify for this exclusion from the noise emission requirements, a craft 'built for own use' must have been substantially built and used exclusively by the owner. A craft that is completed by the owner by the addition of fittings and finishing parts is not 'built for own use'. Further clarification on craft built for own use are given in the application guide to Directive 94/25/EC.

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;*

Any reference to 'recreational craft' in this Directive is intended to include all craft covered by the above definition unless they are excluded by Article 2.1 and except for personal watercraft (see point 3(b) below). The harmonised standard for measurement of hull length is EN ISO 8666:2002 Principal data.

- (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;*

Other types of craft with water jet propulsion units that are less than 4.0m in length, such as mini jet boats and small RIBs (rigid hull inflatable boats) with water jet propulsion, are not 'personal watercraft'. They should be treated as recreational craft (if they are 2,5 m in length or above) and must meet the relevant design and construction requirements, exhaust emission and noise emission limits.

Craft that meet the definition of personal watercraft except that their length is equal to or greater than 4.0m (when measured according to EN ISO 8666) should be treated as recreational craft and meet the relevant exhaust gas and noise emission limits.

Although no reference is made in the definition above to the use of personal watercraft, as this directive is for marine craft intended for recreational use, any personal watercraft that are placed on the Community market solely for commercial use are outside of the scope of this Directive.

(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;

The definition of propulsion engines is limited to spark or compression internal combustion engines (e.g. petrol or diesel engines respectively) and accordingly electric engines or steam engines are excluded from the emission requirements even if they are the sole source of power for propulsion. If a spark or compression internal combustion engine is used in conjunction with another type of engine, such as diesel-electric propulsion, then the internal combustion engine is a propulsion engine and must comply with the emission requirements. If a spark or compression internal combustion engine is installed to power a hydraulic motor drive for propulsion then the internal combustion engine is a propulsion engine and must meet the emission requirements.

(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 %;*

A ‘major engine modification’ is relevant only for the application of the exhaust emission requirements for propulsion engines that are installed or are intended to be installed in recreational craft or personal watercraft and have been placed on the market and/or put into service after the date of entry into application of Directive 2003/44/EC (see clarifications concerning article 1.1(d)) and which have been subsequently subject to a modification in accordance with this definition.

The first indent provides that routine engine maintenance and replacement of engine components within the manufacturer’s specifications does not qualify as a ‘major engine modification’. Such maintenance may extend to a complete engine rebuild within the manufacturer’s specifications.

If an engine is more extensively modified in a way that the gas emissions could potentially exceed the limits of this Directive, then it would be considered a major engine modification even if the power output increases by less 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;*

A ‘major craft conversion’ is relevant only for the application of the noise emission requirements. In this context the first indent refers to changing the means of propulsion as defined in (f) below. The replacement of the propulsion engine(s) with another engine(s) of different type is not changing the means of propulsion as defined and accordingly engine replacement is not a ‘major craft conversion’. The third indent on alterations to the craft is intended to cover alterations to an extent that the craft should be considered as a new craft.

Note also the interpretation in the Guide to the application of Directive 94/25/EC specifying that the “re-building” or modifying of a boat (or component) in the context of manufacturer responsibility means that the boat has been changed to such an extent that compliance considerations with the Essential Requirements are altered from those of the boat when originally assessed. This would mean, for example, that the stability and buoyancy characteristics of the boat have been changed due to the addition of new accommodation or rigging arrangement. Such modification would mean that the “new” boat presents a new overall design and with it new risks. In this respect such a modification in a third country of a boat with CE Marking or an existing boat would require compliance with the Directive if placed on the EEA market or put into service.

(f) “means of propulsion”: the mechanical method by which the craft is driven, in particular marine propellers or waterjet mechanical drive systems;

In accordance with this definition, a change to the means of propulsion would be, for example, changing from a conventional propeller shaft drive to a waterjet propulsion unit or surface piercing propellers.

(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;

The definition of an ‘engine family’ is important for the application of the exhaust gas emission requirements. Appendix 4 includes the text taken from Directive 97/68/EC (engines for non-road mobile machinery) on the parameters of an engine family and choice of parent engines. Details of engine families are also given in the harmonised standard EN ISO 8178-1:1996 *Reciprocating internal combustion engines – Exhaust emission measurement – Part 7: Engine family determination*. See also comments on Annex VII (module B).

Note: Although the definition above refers only to engine families with respect to exhaust emission characteristics, the term ‘engine family’ is also used when referring to noise emission limits in Annexes VII and XVII.

(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;

A manufacturer is therefore involved in production and/or the placing on the market of the product. Further clarification on a ‘manufacturer’ is given in the application guide to Directive 94/25/EC.

(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.’

Further clarification on an ‘authorised representative’ is given in the application guide to Directive 94/25/EC.

**AMENDMENTS TO ARTICLE 4:
FREE MOVEMENT OF PRODUCTS REFERRED TO IN ARTICLE 1(1)**

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.

The words 'and/or' have been added in place of the word 'and' as used in Directive 94/25/EC. This amendment has been made as some products covered by this Directive and bearing the CE mark may be put into service for the first time but not placed on the market. Further clarification on 'placing on the market' and 'putting into service' is given in the application guide to Directive 94/25/EC.

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.

Clarification on placing on the market of partly completed boats is given in the application guide to Directive 94/25/EC.

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.

This paragraph has been amended by adding the words 'and/or' in place of the word 'and' (see clarification under 4.1 above) and a reference to Annex XV. Both Annex XV and Annex IIIb outline information that should be included in the Declaration of Conformity and the Annex III b declaration.

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.

(*) Directive 97/68/EC of the European Parliament and of the Council of 16 December 1997 on the approximation of the laws of the Member States relating to measures against the emission of gaseous and particulate pollutants from internal combustion engines to be installed in non-road mobile machinery (OJ L 59, 27.2.1998, p. 1). Directive as amended by Commission Directive 2001/63/EC (OJ L 227, 23.8.2001, p. 41).

(**) Council Directive 88/77/EEC of 3 December 1987 on the approximation of the laws of the Member States relating to the measures to be taken against the emission of gaseous and particulate pollutants from compression ignition engines for use in vehicles, and the emission of gaseous pollutants from positive ignition engines fuelled with natural gas or liquefied petroleum gas for use in vehicles (OJ L 36, 9.2.1988, p. 33). Directive as last amended by Commission Directive 2001/27/EC (OJ L 107, 18.4.2001, p. 10).

The first indent above refers to inboard engines and stern drive engines without integral exhausts that have been found to comply with the exhaust gas emission requirements of this Directive as a result of testing in accordance with the specified harmonised standard (see comments on Annex 1, Part B and on module B (EC type-approval)). These engines may be placed on the market if accompanied by a declaration of conformity in accordance with Annex XV.3 and do not need to be CE-marked (Article 10(1)).

The second and third indents apply to engines intended for use as inboard propulsion engines or stern drive engines without integral exhaust that are type-approved (or from type-approved engine families) according to Directive 97/68/EC (stage II) or Directive 88/77/EEC. These engines have been type-approved initially by the engine manufacturer for other applications covered by those Directives and may subsequently be placed on the market for installation on recreational craft by that manufacturer, provided that he declares in the accompanying Annex XV.3 declaration that when installed in accordance with his supplied instructions the engine will meet the exhaust emission requirements of Directive 2003/44/EC.

It should be noted in this context that Clause 7 of Annex I of Directive 88/77/EC provides that the engine installation on the vehicle shall comply with the following characteristics in respect to the type-approval of the engine:

1. intake depression shall not exceed that specified for the type-approved engine;
2. exhaust back pressure shall not exceed that specified for the type-approved engine;
3. maximum power absorbed by the engine-driven equipment shall not exceed the maximum permissible power specified for the type-approved engine.

Directive 97/68/EC provides in Article 4.3 that "where the engine to be approved fulfils its function or offers a specific feature only in conjunction with other parts of the non-road mobile machinery, and for this reason compliance with one or more requirements can be verified only when the engine to be approved operates in conjunction with other machinery parts, whether real or simulated, the scope of the type-approval of the engine(s) must be restricted accordingly. The type-approval certificate for an engine type or engine family shall then include any restrictions on its use and shall indicate any

Marinising of engines referred to in Article 4.4:

In the case where a party marinises such engines, it may place them on the recreational craft market without subjecting them to further testing and conformity assessment procedures under Directive 2003/44/EC, provided that the modifications for marine use:

- remain within the engine manufacturer's supplied instructions referred to in his Annex XV.3 declaration;
- do not entail a "major engine modification" as defined in article 1.3.(d), and
- do not cause the exhaust emissions to exceed the limits specified in Annex I.B of Directive 2003/44/EC.

Otherwise, the responsibility for ensuring compliance with the exhaust emissions of Directive 2003/44/EC will have to be assumed by the mariniser, by applying the procedures of Annex I.B and Article 8.3.

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.

This provision has been amended to apply also to engines and personal watercraft in addition to recreational craft (completed and partly completed) and components referred to in Annex II.

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.

This paragraph is relevant in particular to outboard engines. Further comments on this article are given in the application guide to Directive 94/25/EC.

AMENDMENTS TO ARTICLE 6: COMMITTEE PROCEDURE

3. the following Article shall be inserted:

'Article 6a

Committee procedure

- 1. Amendments which are necessary, in the light of evolution of technical knowledge and new scientific evidence, to the requirements of Annex I.B.2 and Annex I.C.1 excluding direct or indirect modifications to exhaust or noise emission values and to the Froude and P/D ratio values shall be adopted by the Commission assisted by the Standing Committee set up pursuant to Article 6(3), acting as a regulatory committee in accordance with the procedure referred to in paragraph 2. Issues to be dealt with shall include the reference fuels and the standards to be used for exhaust and noise emissions testing.*
- 2. Where reference is made to this paragraph, Articles 5 and 7 of Decision 1999/468/EC shall apply, having regard to the provisions of Article 8 thereof.*

The period laid down in Article 5(6) of Decision 1999/468/EC shall be set at three months.

- 3. The Committee shall adopt its rules of procedure.*

A regulatory committee has been established to assist the Commission in adopting amendments related to exhaust and noise emission requirements in the light of technical developments. Changes to the exhaust and noise emission limits or to the P/D ratio and Froude number limits cannot be introduced through this procedure. Hence the remit of this committee is limited to technical issues such as reference fuels and relevant developments of standards for exhaust gas and noise emission measurement.

AMENDMENTS TO ARTICLE 7: SAFEGUARD CLAUSE

4. the first subparagraph of Article 7(1) shall be replaced by the following:

'1. Where a Member State ascertains that products falling within the scope of Article 1 and bearing the CE marking referred to in Annex IV, when correctly designed, constructed, installed where appropriate, maintained and used in accordance with their intended purpose may endanger the safety and health of persons, property or the environment, it shall take all appropriate interim measures to withdraw them from the market or prohibit or restrict their being placed on the market and/or put into service.'

This amendment extends the safeguard clause to cover products that have been added to the scope of the Directive, i.e. personal watercraft (with regard to design and construction) and propulsion engines (with regard to exhaust emissions and noise emissions).

5. Article 7(3) shall be replaced by the following:

'3. Where a non-complying product referred to in Article 1 bears the CE marking, the appropriate measures shall be taken by the Member State which has authority over whomsoever affixed the marking; that Member State shall inform the Commission and the other Member States thereof.'

This amendment extends the safeguard clause to cover products that have been added to the scope of the Directive, i.e. personal watercraft (with regard to design and construction) and propulsion engines (with regard to exhaust emissions and noise emissions).

AMENDMENTS TO ARTICLE 8: CONFORMITY ASSESSMENT

6. Article 8 shall be replaced by the following:

‘Article 8

1. Before placing on the market, and/or putting into service, products referred to in Article 1(1) the manufacturer or his authorised representative established within the Community shall apply the procedures referred to in paragraphs 2, 3 and 4 of this Article.’

The paragraphs referred to specify the procedures for conformity assessment and have been amended to increase the choice of conformity assessment modules that may be applied. The table below summarises the available conformity assessment modules and the comments below give further clarification on each module.

AVAILABLE CONFORMITY ASSESSMENT MODULES

	Product type / Design Category	Available Modules	
Design and construction	Recreational craft	2,5 m ≤ hull length <12 m	12 m ≤ hull length ≤ 24 m
	A / “Ocean”	Aa, B+C, B+D, B+E, B+F, G or H	B+C, B+D, B+E, B+F, G or H
	B / “Offshore”		
	C / “Inshore”	A, Aa, B+C, B+D, B+E, B+F, G or H If harmonised standard for stability and buoyancy are complied with	
		Aa, B+C, B+D, B+E, B+F, G or H If harmonised standard for stability and buoyancy are not complied with	
	D / “Sheltered Waters”	A, Aa, B+C, B+D, B+E, B+F, G or H	
	PWC	A, Aa, B+C, B+D, B+E, B+F, G or H	
Components	B+C, B+D, B+F, G or H		
Exhaust	Recreational Marine Propulsion Engines.	B+C, B+D, B+E, B+F, G or H	

	Product type / Design Category	Available Modules		
Noise		Pass-by test	Reference Boat	F _n + P/D method
	Outboard engines, Personal Watercraft and stern drive engines with integral exhaust	Aa, G or H		
	Recreational craft with inboard engines or stern drive engines without integral exhaust	Aa, G or H	A, Aa, G or H	A, Aa, G or H

POST CONSTRUCTION ASSESSMENT

In the case of post-construction assessment for recreational craft, if neither the manufacturer nor his authorised representative established within the Community fulfils the responsibilities for the product's conformity to this Directive, these can be assumed by any natural or legal person established within the Community who places the product on the market, and/or puts it into service, under his own responsibility. In such a case, the person who places the product on the market or puts it into service must lodge an application for a post-construction report with a notified body. The person who places the product on the market and/or puts it into service must provide the notified body with any available document and technical file referring to the first placing on the market of the product in the country of origin. The notified body shall examine the individual product and carry out calculations and other assessment to ensure its equivalent conformity with the relevant requirements of the Directive. In this case, the Builder's plate described in Annex I, 2.2 shall include the words ("Post-construction certificate"). The notified body shall draw up a report of conformity concerning the assessment carried out and shall inform the person who places the product on the market and/or puts it into service of his obligations. That person shall draw up a declaration of conformity (see Annex XV) and affix, or cause to be affixed, the CE mark accompanied by the distinguishing number of the relevant notified body on the product.

This paragraph specifies the procedures for post-construction assessment of recreational craft and contains provisions that were not in Directive 94/25/EC, in particular the requirement for a notified body to be involved. Where the provisions of this paragraph apply, the procedures described must be followed, i.e. no alternative modular choice is available.

In this context 'post-construction assessment' refers to conformity assessment that is required for craft that were completed, and normally have been used, prior to the assessment. Examples of such cases would be a craft built for own use and then placed on the Community market as a second hand product within 5 years after being first put into service, or a used boat from a third country being imported and hence placed on the

Community market for the first time. This would also include boats manufactured in the EEA for export outside the EEA (and have not been subject to conformity assessment and CE-marking), which afterwards return to the EEA as second hand boat.

In such cases the person who places the craft on the market or puts it into service must apply to a notified body to conduct the assessment by examining the individual craft and its documentation. The craft must have a CE mark affixed and a Builder's plate which has on it the words 'Post-construction certificate'. Note in this respect the clarification to article 4.1 that some products may be put into service for the first time without being placed on the market.

MODULES AVAILABLE FOR DESIGN AND CONSTRUCTION

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:

The following paragraphs list the conformity assessment modules available for assessment of the design and construction requirements for recreational craft (points 2(a), 2(b) and 2(c) below), personal watercraft (point 2(d) below) and components referred to in Annex II (point 2(e) below). The modules to be applied for conformity assessment of the exhaust and noise emission requirements are given in points 3 and 4 below. In some cases the modules applied for assessment of product's design and construction may therefore be different from the modules applied for the product's emission requirements.

(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

The amendment introduces the option of using assessment modules other than module Aa for recreational craft with a hull length from 2,5 m to 12 m of design category A or B. Manufacturers of such boats who would like a notified body to assess conformity of all design and construction requirements may request either an EC type-examination of the boat (module B) supplemented by module C, D, E or F, or a unit verification according to module G. Alternatively, full quality assurance assessment according to module H may be applied. Note that these additional conformity assessment options are available from 1 January 2005, date of entry into application of the provisions of Directive 2003/44/EC.

Manufacturers of category A or B boats of less than 12 m hull length who wish to apply internal production control plus stability and buoyancy tests verified by a notified body (module Aa) may continue to do so.

- (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;*

The amendment introduces the choice of modules B+E as a new option for recreational craft of design category A or B with a hull length from 12 m to 24 m. The remaining choice of modules provided for in Directive 94/25/EC has not been changed for recreational craft over 12 m hull length of design category A or B.

(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,*

This amendment introduces the option of using assessment modules other than module A for recreational craft of design category C with a hull length of 2,5 m to 12 m that comply with the harmonised standards relating to stability and freeboard and buoyancy and flotation as applicable to boat length and type (EN ISO 12217-1:2001 *Stability and buoyancy – Methods of assessment and categorisation* - Part 1: *Non-sailing boats over 6 m L_h*, EN ISO 12217-2:2001 *Stability and buoyancy – Part 2: Sailing boats over 6 m L_h* and EN ISO 12217-3:2002 *Stability and buoyancy - Part 3: Boats up to and including 6 m L_h*).

Manufacturers of such craft who would prefer a notified body's intervention may apply for conformity assessment in accordance with module Aa (only stability and buoyancy assessed by the notified body) or for an EC type-examination of the craft (module B) supplemented by module C, D, E or F, in which case all the design and construction requirements of a specimen craft are assessed by the notified body. Alternatively, unit verification according to module G or full quality assurance assessment according to module H may be applied. Note that these additional conformity assessment options are available from 1 January 2005 (date of entry into application of Directive 2003/44/EC).

Manufacturers of category C boats of 2,5 m to 12 m length that comply with the harmonised stability standards and wish to apply an internal production control (module A) without involvement of a notified body may continue to do so.

- *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;*

This amendment introduces the option of using assessment modules other than module Aa for recreational craft of design category C with a hull length of 2,5 m to 12 m that do not comply with the harmonised standards relating to stability and freeboard and buoyancy and flotation. Boats of this type may be assessed by an EC type-examination of the craft (module B) supplemented by module C, D, E or F, in which case all the design and construction requirements of a specimen craft are assessed by the notified body. Alternatively, unit verification according to module G or full quality assurance assessment according to module H may be applied.

Internal production control according to module A remains prohibited for craft of design category C with a hull length of 2,5 m to 12 m if they do not comply with the harmonised stability standard.

(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;

The amendment introduces the choice of modules B+E as a new option for recreational craft of design category C with a hull length from 12 m to 24 m. The remaining choice of modules provided for in Directive 94/25/EC has not been changed for recreational craft over 12 m hull length of design category C.

(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;

The amendment introduces the option of using assessment modules other than module A for boats of design category D with a hull length of 2,5 m to 24 m. Manufacturers of such craft who would prefer a notified body to assess compliance with design and construction requirements may apply for conformity assessment in accordance with module Aa (only stability and buoyancy assessed by notified body), or for an EC type-examination of the craft (module B) supplemented by module C, D, E or F, in which case all the design and construction requirements of a specimen craft are assessed by the notified body. Alternatively, unit verification according to module G or full quality assurance assessment according to module H may be applied. Note that these additional conformity assessment options are available from the date of entry into application of the Directive (1 January 2005).

Manufacturers of category D boats who wish to apply internal production control (module A) without involvement of a notified body may continue to do so.

(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 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;

The modules listed in (d) are available as options for conformity assessment of personal watercraft against the design and construction requirements, which exclude the exhaust and noise emission requirements. Compliance of the propulsion engine installed in the personal watercraft has to be demonstrated by the engine manufacturer in accordance with one of the modules specified in point 3 below, and the manufacturer of the personal watercraft has to demonstrate compliance with the noise requirements in accordance with one of the modules specified in point 4 below. Accordingly a personal watercraft manufacturer may choose to apply internal production control (module A) for the design and construction requirements, but must involve a notified body for the conformity assessment of the noise emissions of the personal watercraft, and in the case where he is also manufacturing the propulsion engine, also against the exhaust emissions, as specified in points 3 and 4 below.

If module Aa is chosen by the personal watercraft manufacturer, tests or calculations applied to demonstrate compliance with the design and construction requirements (related to stability and buoyancy) shall be carried out under the responsibility of the notified body. The notified body may accordingly witness tests and check calculations.

If module B is chosen the notified body shall conduct an EC type-examination of a specimen personal watercraft representative of the production envisaged, with respect to the design and construction requirements. This module has to be supplemented in the production stage with module C applied by the personal watercraft manufacturer, or by modules D, E or F with the involvement of the notified body that carried out the EC type-examination.

A manufacturer of personal watercraft may also apply for unit verification according to module G or full quality assurance assessment in accordance with module 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.

The modular choice for conformity assessment of Annex II components has been extended with modules B+E. The remaining choice of modules provided for in Directive 94/25/EC has not been changed for Annex II components.

MODULES AVAILABLE FOR EXHAUST EMISSIONS

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.

For demonstration of compliance with the exhaust emission requirements, the engine manufacturer must request a notified body to conduct an EC type-examination of the engine specimen (module B) supplemented by modules C, D E or F, or to apply unit verification (module G), or have a full quality assurance system (module H).

Engines that have been type-approved to Directives 97/68/EC (stage II) or 88/77/EC do not require further conformity assessment under this Directive provided that the engine manufacturer or his authorised representative established in the EEA issues an Annex XV.3 declaration of conformity in which he confirms 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 engine manufacturer's supplied instructions.

For propulsion engines that are subject to a major engine modification according to definition 3d, the party responsible for the engine modification must request a notified body to conduct a unit verification of the engine according to module G.

MODULES AVAILABLE FOR SOUND EMISSIONS

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*

Recreational craft with inboard propulsion engines, or with stern drive engines without integral exhaust, must have their noise emissions measured in accordance with the tests defined in the harmonised standard (EN ISO 14509) *Measurement of sound pressure level of airborne sound emitted by powered recreational craft*) and assessed on their conformity with the noise emission requirements in accordance with one of the modules described above, unless the Froude number/power displacement ratio method or the certified reference boat method (see (ii) and (iii) below) can be used as an alternative. The noise measurement tests must be conducted under the responsibility of a notified body (module Aa), by unit verification (module G) or under full quality assurance assessment (module H). See also comments on Annex VI, B.

Such recreational craft which are subject to a ‘major craft conversion’ and subsequently placed on the Community market within 5 years following conversion must also comply with the noise emission requirements when measured in accordance with the harmonised standard, unless the alternative of (ii) and (iii) below can be used. The party responsible for the major craft conversion must request a notified body to conduct a unit verification of the craft according to module G and apply the post-construction procedures described above for recreational craft.

(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;

Recreational craft with inboard propulsion engines or stern drive engines without integral exhaust that have a Froude number of $\leq 1,1$ and a power to displacement ratio of < 40 , and where the engine and exhaust system are installed in accordance with the engine manufacturer’s specifications (see the requirements of Annex 1.C 1.2 and 1.3) are deemed to comply with the noise requirements. Such craft would typically be displacement (non-planing) motor boats or sailing boats with auxiliary propulsion engines.

The manufacturer of such craft may apply internal production control (module A) for the noise emission requirements by calculating the Froude number and power-displacement ratio to demonstrate that they will be below the specified limits if the engine and exhaust system are installed in accordance with the engine manufacturer’s specifications. No involvement of a notified body is required for this under module A, but the calculations and details of the engine and exhaust installation must be documented by the boat manufacturer.

If the boat manufacture would prefer to have these calculations and the installation of the engine and the exhaust system certified by a notified body, then module Aa may be applied, in which case the ‘tests’ referred to above would involve the notified body verifying and certifying the Froude number and power displacement calculations as well as whether the engine and exhaust system have been installed in accordance with the manufacturers specifications. See also comments on Annex VI, B. Demonstration of conformity with the noise emission requirements using the Froude number and power displacement ratio method may also be made under module G (unit verification) or module H (full quality assurance).

Recreational craft with inboard propulsion engines or with stern drive engines without integral exhaust which have been subject to a ‘major craft conversion’ and subsequently are placed on the community market within 5 years following the conversion must also demonstrate compliance with the noise emission requirements. This may be done by applying the Froude number and power displacement method, if it is applicable for the boat type, in accordance with one the modules described above and the provisions on post-construction assessment.

(iii) where certified reference boat data, established in accordance with point (i), is used for assessment: 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;

Recreational craft with inboard propulsion engines or stern drive engines without integral exhausts which have key design parameters that are compatible with those of a certified reference boat to tolerances specified in the harmonised standard are deemed to comply with the noise emission requirements.

The craft manufacturer applying this method may demonstrate compliance without the involvement of a notified body (module A), in which case documentation demonstrating compatibility with the key design must be prepared and provided by the craft manufacturer. Alternatively the craft manufacturer may involve a notified body by opting for module Aa, in which case the 'supplementary requirements' referred to above would be limited to the notified body verifying and certifying compatibility of the hull/engine combination's key design parameters with certified reference boat data within the tolerances specified in the harmonised standard. See also comments on Annex VI, B. The manufacturer may also opt for the involvement of a notified body for this purpose by applying unit verification (module G) or full quality assurance assessment (module H).

Recreational craft with inboard propulsion engines or with stern drive engines without integral exhaust which have been subject to a 'major craft conversion' and subsequently are placed on the community market within 5 years following the conversion must also demonstrate compliance with the noise emission requirements. This may be done by applying this reference boat method, if the key design parameters of the hull/engine combination of the craft are the same or compatible with those of a certified reference boat, in accordance with one of the modules described above and the provisions on post-construction assessment.

(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.;

For personal watercraft, outboard engines and stern drive engines with integral exhausts, noise emissions must be measured in accordance with the tests defined in the harmonised standard, EN ISO 14509 *Measurement of sound pressure level of airborne sound emitted by powered recreational craft*.

The manufacturer of the personal watercraft or engine may apply either internal production control (module Aa), in which case such tests must be conducted under the responsibility of a notified body, or unit verification (module G), or under full quality assurance assessment (module H). Manufacturers of personal watercraft must therefore involve a notified body for the noise emission tests even if they apply internal production control for the design and construction requirements. See also Annex VI, B.

AMENDMENTS TO ARTICLE 10: CE MARKING

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;

The amendment adds personal watercraft to the list of products that must be CE marked in accordance with this Directive.

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

Outboard engines must be CE marked to indicate that they meet the exhaust and noise requirements of this Directive. Note that outboard engines are already required to be CE marked in accordance with the Machinery Directive – as explained in the application guide to Directive 94/25/EC.

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

Stern drive engines with integral exhaust must be CE marked to indicate that they meet the exhaust and noise emission requirements of this Directive.

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.*

This amendment extends the requirement for the CE-marking to be visible, legible and indelible on personal watercraft, outboard engines, and stern drive engines with integral exhaust. With regard to the affixing of the CE marking to the packaging of Annex II components, the application guide to Directive 94/25/EC specifies this should be considered only in exceptional cases where affixing the CE-mark on the product itself would be impossible.

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

This amendment extends the requirement for the identification number of the notified body to accompany the CE mark to the added conformity assessment module E (Annex 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.'*

The wording of this paragraph has been changed to cover all the products added to the scope of the Recreational Craft Directive by the amending Directive 2003/44/EC.

AMENDMENTS TO ANNEX I: ESSENTIAL REQUIREMENTS

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 watercraft.

The preliminary observation above is added to take account of the fact that the amending Directive adds personal watercraft to the scope.

The new essential requirements for exhaust and noise emissions are introduced in the amended Annex I, below. For this purpose the original Annex I of Directive 94/25/EC is renamed part A of Annex I and two new parts, B and C, are added to cover the new essential requirements for exhaust and noise emissions.

ANNEX I PART A: ESSENTIAL SAFETY REQUIREMENTS FOR THE DESIGN AND CONSTRUCTION OF CRAFT

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

BOAT DESIGN CATEGORIES

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

<i>Design category</i>	<i>Wind force (Beaufort scale)</i>	<i>Significant wave height ($H^{1/3}$, metres)</i>
<i>A – “Ocean”</i>	<i>exceeding 8</i>	<i>Exceeding 4</i>
<i>B – “Offshore”</i>	<i>up to, and including, 8</i>	<i>up to, and including, 4</i>
<i>C – “Inshore”</i>	<i>up to, and including, 6</i>	<i>up to, and including, 2</i>
<i>D – “Sheltered waters”</i>	<i>up to, and including, 4</i>	<i>up to, and including, 0,3</i>

For Category D the upper limit for the ‘significant wave height’ has been lowered from 0,5 m to 0,3 m, in accordance with the amended definition for boat design category D in point 4 below.

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 4 m and above but excluding abnormal conditions, and vessels largely self-sufficient.';

The definition is amended to exclude abnormal conditions, such as hurricanes and tornadoes and extreme sea conditions or freak waves generated by abnormal conditions, in line with the interpretation already given in the application guide to Directive 94/25/EC concerning the original definition of design category A .

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, 0,3 m may be experienced, with occasional waves of 0,5 m maximum height, for example from passing vessels.';

The definition for category D has been amended by reducing the upper limit for the significant wave height to 0,3 m (previously 0,5 m), but making allowance for occasional waves of 0,5 m maximum height that may be generated by passing vessels or other local disturbances. The latter amendment is in line with the interpretation already given in the guide to the application of Directive 94/25/EC concerning the original definition of design category D. The description of the typical areas where such conditions may be experienced has been extended with a reference to sheltered coastal waters and small bays, which is also inline with the interpretation given in the application guide to Directive 94/25/EC.

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.'

The only change introduced with this amendment is that the word “Boats” has been replaced by “Craft”, whereby “craft” should be read as covering recreational craft and personal watercraft, in line with the preliminary observation introduced at the beginning of Annex I.

GENERAL REQUIREMENTS

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.'

The wording of the original text under section 2 has been amended to take account of the fact that the scope of application of the general requirements has been extended to personal watercraft.

CRAFT IDENTIFICATION

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:';

The amendment is intended to clarify that the identification number refers to the complete craft, not just the hull, in line with the interpretation already given in the guide to the application of Directive 94/25/EC concerning the identification number. The harmonised standard, EN ISO 10087:1996/A1:2000 *Hull identification - Coding system* is being amended accordingly.

This requirement for a craft identification number now applies to personal watercraft as well as to recreational craft.

BUILDER'S PLATE

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';

The requirement to state the manufacturer's maximum recommended load on the builder's plate is amended by excluding the weight of the liquids in any fixed tanks from the weight shown on the plate. This is to avoid the possibility of users accidentally overloading craft because they thought that the weight shown for the content of tanks could be used for carry on items, luggage etc. This is in line with the interpretation already given in the Guide to the implementation of Directive 94/25/EC to the essential requirement 3.6 that fuel and water tanks are assumed to be full when the recommended load is assigned. The provisions of the harmonised standard EN ISO 14945 *Builder's plate* are in accordance with this amended requirement.

MANUFACTURER'S MAXIMUM RECOMMENDED LOAD

9. *in section 3.6 'Manufacturer's maximum recommended load' the following words shall be deleted:*

'..., as marked on the builder's plate,...';

The amendment in 8 above means that the weight shown on the builder's plate will be less than the manufacturer's maximum recommended load for craft with fixed tanks, and it is therefore necessary to delete the words 'as marked on the builder's plate' from manufacturer's maximum recommended load as defined by 3.6.

PERSONAL WATERCRAFT RUNNING WITHOUT A DRIVER

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.'

The amendment introduces a new requirement for personal watercraft to be provided with an engine cut-off device, or a device to automatically reduce speed and to put the craft in a circular forward movement mode, to facilitate re-boarding when the driver dismounts deliberately or falls overboard when the craft is under way. Note that as for sailing dinghies that are capsized-recoverable as defined by EN ISO 12217 Part 3, the assumption has been made that the important requirement for a personal watercraft is the ability of the user to recover from a stability incident, rather than to prevent one.

FUEL TANKS

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.'

The amendment replaces the references to “liquid fuel with a flash point below 55°C” and “liquid fuel with a flash point equal to or above 55°C” by a reference to “petrol fuel” and “diesel fuel” respectively. This is in line with the interpretation already given in the guide to the application of Directive 94/25/EC concerning essential requirement 5.2.2 that the definition of petrol fuel as having a flash point lower than 55°C and diesel fuel as having a flash point equal to or higher than 55°C is obsolete.

FIRE-FIGHTING EQUIPMENT

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.’;

The amendment provides that in case craft are not supplied with fire-fighting equipment, the position and capacity of fire-fighting equipment appropriate to the fire hazard has to be indicated. It is further specified that when this option is applied the craft shall not be put into service until the appropriate fire-fighting equipment is in place. This amendment gives effect to the interpretation already given in the guide to the application of Directive 94/25/EC concerning essential requirement 5.6.2 that due to differing national regulations regarding fire-fighting equipment, only the position for and the capacity of the fire-fighting equipment need be designated.

DISCHARGE PREVENTION

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.’

The amendment to (b) above deletes the reference to fitting holding tanks “on a temporary basis in areas of use where the discharge of human waste is restricted”. This means that irrespective of whether the area of use is an area where the discharge of human waste is restricted, craft with toilets shall always have a provision to fit holding tanks if no such tanks are fitted. The amended requirement may be met by providing any suitable space for fitting holding tanks. This space need not be maintained solely for the purpose of fitting a holding tank, but can be any space that could be adapted if needed.

The amendment also adds a requirement for craft with permanently installed holding tanks to be fitted with a standard outlet connection to enable discharge via a standard on-shore reception facility. The relevant harmonised standard EN ISO 8099:2000 *Toilet waste retention systems* provides details of standard discharge connections.

The amendment also changes the requirement that the valves to be fitted in any through-the-hull piping for human waste should be “capable of being sealed shut” into “capable of being secured in the closed position”. This amendment has been made to make it clear that the requirement can be met by securing the valve opening/closing device in the closed position, for example by securing a seacock lever arm in the closed position mechanically by a bolt, wire etc.

**ANNEX I PART B: ESSENTIAL REQUIREMENTS FOR EXHAUST EMISSIONS
FROM PROPULSION ENGINES**

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.

Annex I.B specifies the new essential requirements for propulsion engines relating to exhaust emissions.

ENGINE IDENTIFICATION

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.

Further guidelines on providing the required information outlined above on a standard 'Engine plate', like the 'Builder's Plate' for the craft, may be prepared.

EXHAUST EMISSION REQUIREMENTS

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

Type	Carbon Monoxide $CO = A + B/P_N^n$ g/kWh			Hydrocarbons $HC = A + B/P_N^n$ g/kWh			Nitrogen oxides NO_x g/kWh	Particulates PT g/kWh
	A	B	n	A	B	n		
Two-stroke spark ignition	150,0	600,0	1,0	30,0	100,0	0,75	10,0	Not applicable
Four-stroke spark ignition	150,0	600,0	1,0	6,0	50,0	0,75	15,0	Not applicable
Compression ignition	5,0	0	0	1,5	2,0	0,5	9,8	1,0

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

(*): EN ISO 8178-1:1996

It is required to use the harmonised standard for exhaust gas emission measurements, which is quoted as EN ISO 8178-1:1996 *Reciprocating internal combustion engines – Exhaust emission measurement – Part 1: Test-bed measurement of gaseous and particulate exhaust emissions*. It should be noted that EN ISO 8178-1:1996 is currently under revision. When the revised draft is complete it may be adopted as the harmonised standard by publishing its references in the Official Journal and the reference to the outdated standard replaced by that of the revised standard through the adoption of an amendment to this Annex using the Regulatory Committee procedure (cf. article 6a).

It should also be noted that other parts of EN ISO 8178 may need to be referred to for application of the exhaust emission tests. EN ISO 8178-4 *Reciprocating internal combustion engines – Exhaust emission measurement – Part 5: Test cycles for different engine applications* defines the test cycles.

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

Reference is made to 130 kW as this is the engine power limit that IMO applies for the NO_x requirements in Annex VI of the MARPOL convention. For engines covered by this Directive the E3 (IMO) or E5 (recreational marine) duty cycles may also be used for engine power below 130 kW.

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.

The specifications of these reference fuels as specified in Directive 98/69/EC are given in Appendix 5 of this guide for petrol and diesel fuel. If, in the light of evolution of technical knowledge and new scientific evidence amendments to the specification for reference fuels would become necessary, these could be adopted using the Regulatory Committee procedure provided for in article 6a.

DURABILITY

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.*

The engine manufacturer is responsible for endurance testing and calculation of component fatigue to ensure that these requirements for durability will be met. Involvement of a notified body in these tests must be in accordance with the requirements of the conformity assessment module chosen by the engine manufacturer, in accordance with article 8.3. The number of hours referred to are operating hours in normal conditions of use.

OWNER'S MANUAL

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.*

The engine's power shall be measured in accordance with the harmonised standard EN ISO 8665:1995/A1:2000 *Marine propulsion engines and systems - Power measurements and declarations*. The engine power measured according to this standard must be specified by the engine manufacturer in the owner's manual supplied with the engine. Note that EN ISO 8665 is currently under revision.

According to EN ISO 8665 the engine's power shall be declared as a single value accompanied by a statement of the engine speed and whether the power is crank shaft power or propeller shaft power. For engines sold with a complete propulsion unit the propeller shaft power shall be declared and for engines sold with reduction and/or reversing gear the power at the coupling to the propeller shaft declared.

The engine power and speed may alternatively be presented as a power curve (see also notes on calculation of the Power/displacement ratio in Annex I.C)

ANNEX I PART 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.

Annex I.C specifies the new essential requirements for recreational craft with inboard or stern drive engines without integral exhaust, personal watercraft and outboard engines and stern drive engines with integral exhaust relating to noise emissions.

For personal watercraft and outboard engines and stern drive engines with integral exhaust the noise emission levels must be measured by tests as defined in the harmonised standard as specified in 1.1 below. For recreational craft with inboard engines, or with stern drive engines without integral exhaust, conformity with the noise emission requirements may, depending on the speed and other design parameters of the craft, be demonstrated by one of 3 methods: measurement by tests as defined the harmonised standard (1.1 below), application of the Froude number and power displacement ratio method (1.2 and 1.3 below) or application of the reference boat method (1.4 and 1.5 below).

NOISE EMISSION LEVELS

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 2

<i>Single Engine Power In kW</i>	<i>Maximum Sound Pressure Level = L_{pASmax} In dB</i>
<i>$P_N \leq 10$</i>	<i>67</i>
<i>$10 < P_N \leq 40$</i>	<i>72</i>
<i>$P_N > 40$</i>	<i>75</i>

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

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

*(**) EN ISO 14509*

The current version of the harmonised standard EN ISO 14509 that specifies the noise emission measurement tests is EN ISO 14509:2000 and Amendment 1 *Measurement of sound pressure level of airborne sound emitted by powered recreational craft*. The standard provides for the noise emissions of outboard engines to be measured when they are installed on standard craft and the amendment provides for noise emission measurement of sterndrive engines with integral exhausts using standard craft. The standard is currently being revised and will be re-named as EN ISO 14509 Part 1.

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 ≤ 40 and where the engine and exhaust system are installed in accordance with the engine manufacturer's specifications.

Recreational craft with inboard propulsion engines, or with stern drive engines without integral exhaust, that have a Froude number of $\leq 1,1$ and a power displacement ratio of ≤ 40 as specified below, and where the engine and exhaust system are installed in accordance with the engine manufacturer's specifications are deemed to comply with the

Directive's noise emission requirements without the need for noise emission measurement tests. Such craft will typically be displacement (non-planing) motor boats or sailing boats with auxiliary inboard engines – see the example calculations below.

Where this alternative is applied the calculations and details of the engine and exhaust system installation, which must be in accordance with the engine manufacturer's specifications, must be recorded and a statement made in the declaration of conformity for the craft according to Annex XV.

1.3 "Froude number" shall be calculated by dividing the maximum boat speed V (m/s) by the square root of the waterline length Lwl (m) multiplied by a given gravitational constant, (g = 9,8 m/s²)

$$Fn = \frac{V}{\sqrt{g.Lwl}}$$

The maximum boat speed V (m/s) to be used in the above equation is to be taken as if measured with the craft at performance test mass (m_P) condition and the corresponding Lwl (m) as specified in EN ISO 8666 *Principal data*.

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

The engine power (P) to be used for calculation of the power displacement ratio in the above equation is the propeller shaft power (or the crank shaft power in accordance with EN ISO 8665 (see clarifications under clause 4 of part B of Annex I)).

The power has to be expressed in kW (note that where engine power data available are expressed in Horse Power (hp), the kilowatt (kW) power is obtained from multiplying the horse power data by 0,75).

The displacement (D) to be used in the above equation is the boat's displacement at performance test mass (m_P) condition according to EN ISO 8666 *Principal data* in tonnes (Kg/1000). Some examples of these calculations are given below.

Examples of 'Froude number' and 'Power displacement ratio' calculations

1) A typical motor cruiser could be as follows:

Waterline length	Lwl = 7,8 metres
Displacement	D = 4 tonnes
Engine power	P = 35hp = 26 kW
Speed (max)	V = 8 knots = 4,1 metres per second

The 'Froude number' would be calculated from:
$$Fn = \frac{4,1}{\sqrt{9,8 \times 7,8}} = 0,47$$

The Power Displacement ratio would be:
$$P/D = 26/4 = 6,5$$

As the 'Froude number' is less than 1,1 and the Power displacement ratio is less than 40 the craft in question will be deemed to comply with the noise emissions.

2) A sailing yacht could be as follows:

Water line length	Lwl = 11,13 metres
Displacement	D = 12,56 tonnes
Engine power	P = 56hp = 42 kW
Speed (max)	V = 9knots = 4,6 metres per second

The 'Froude number' would be calculated from:
$$Fn = \frac{4,6}{\sqrt{9,8 \times 11,13}} = 0,44$$

The Power Displacement ratio would be:
$$P/D = 42/12,56 = 3,34$$

As the 'Froude number' is less than 1,1 and the Power displacement ratio is less than 40 the yacht in question will be deemed to comply with the noise emissions.

3) A faster motor cruiser could be as follows:

Waterline length	Lwl = 10,2 metres
Displacement	D = 6 tonnes
Engine power	P = 300hp = 225 kW
Speed (max)	V = 22 knots = 11,3 metres per second

The 'Froude number' would be calculated from:
$$Fn = \frac{11,3}{\sqrt{9,8 \times 10,2}} = 1,13$$

The Power Displacement ratio would be:
$$P/D = 225/6 = 37,5$$

The Power displacement ratio is less than 40 but the 'Froude number' is more than 1,1 so the craft in question fails the criteria. This method may therefore not be applied and the craft must be tested in accordance with the pass-by test of ISO 14509 to establish if it complies with the noise emission requirements (or apply the reference boat method, if applicable).

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.

This alternative to noise emission testing to demonstrate compliance with the noise emission requirements of recreational craft with inboard propulsion engines, or stern drive engines without integral exhausts, may be used if it can be demonstrated that the key design parameters of the craft are the same as or compatible with those of a certified reference boat to tolerances specified in the harmonised standard. The key design parameters to be compared and tolerances are specified in the harmonised standard EN ISO 14509. prEN ISO 14509:2 *Measurement of airborne sound emitted by powered recreational craft – Part 2: Sound Assessment using reference craft* is intended to become the relevant part of the harmonised standard for this purpose.

The concept of using reference boats was developed to reduce the potential costs for demonstrating compliance of sound emissions regulations. In particular, to avoid a situation where craft manufacturers might have to test each and every hull/engine model configuration.

A 'certified reference boat' may be any hull/engine combination that has been subject to a full pass-by sound test in accordance with EN ISO 14509-1. Providing the hull/engine combination passes the Directive's specified sound level requirements for its engine size, the appropriate key design parameters of that hull/engine combination may then be added to the list of certified reference boats. The published list of certified reference boats will be held centrally. Full details of this list will be available for consultation to all boat-builders and/or engine manufacturers, whether large or small, and other interested parties, such as notified bodies.

Subsequently, boat-builders wishing to use this method to establish compliance of a new hull/engine combination may choose a reference boat from the list that is most similar to their production hull/engine combination. They would then carry out a comparison between the key hull/engine design parameters of the candidate craft against those of the chosen reference boat to establish compatibility. If the key design parameters of both hull/engine combinations are the same within the tolerances specified in the standard then the candidate craft is deemed to comply with the Directive's noise requirements without the need for any sound testing. The key design parameters relate to the craft's principle dimensions, engine specifications and the effectiveness of the exhaust system.

In addition to providing this comparative method, which involves no sound testing, the current draft of prEN ISO 14509-2 provides an alternative comparative method in which the key design parameters for the engine and exhaust system are replaced by measurement of the engine sound over the transom of the craft when it is operating under power. This alternative does not require information on the engine and exhaust system as the engine noise of the craft under consideration is measured. This means that this alternative can only be applied to a complete boat that may be tested when underway.

OWNER'S MANUAL

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 I.A 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.

Introduces a new requirement for the owner's manual supplied with the recreational craft or personal watercraft to specify information on maintenance of the craft, engine and exhaust system to ensure continued compliance with the noise limits. With respect to stern drive engines with integral exhaust this requirement is satisfied by keeping a copy of the owner's manual for the engine with the owner's manual for the craft, provided that the owner's manual for the engine provides instructions as laid out in the requirements above.

For outboard engines, the owner's manual required under Annex I.B.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.

The owner's manual supplied with the outboard engine shall include information on maintenance to ensure continued compliance with the noise emission limits.

AMENDMENTS TO ANNEX II: COMPONENTS

FUEL TANKS AND FUEL HOSES

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

'4. Fuel tanks intended for fixed installations and fuel hoses.'

The amendment specifies that only fuel tanks intended for fixed (permanent) installation in craft are covered by Annex II when placed on the market separately as components. Accordingly portable fuel tanks of any capacity are excluded from the scope of Annex II and therefore should not be CE marked for this Directive. Fuel tanks that are an integral part of the structure of the craft are also excluded from the scope of Annex II and therefore should not be CE marked.

AMENDMENTS TO ANNEX VI: INTERNAL PRODUCTION CONTROL PLUS TESTS (MODULE Aa, Option 1)

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:

The requirements of this annex have been arranged so that part A describes the procedures for assessment of the design and construction requirements of recreational craft and personal watercraft according to module Aa and part B describes procedures for assessment of noise emissions of recreational craft with inboard or stern drive engines without integral exhaust and personal watercraft

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.

For recreational craft, the requirements of module Aa remain the same except that the requirement to affix the notified body's distinguishing number during the manufacturing process has been deleted.

If module Aa is chosen, the tests, calculations or controls applied to demonstrate compliance with the stability and buoyancy requirements as specified in a) and b) above shall be carried out by manufacturer or on his behalf under the responsibility of the notified body chosen by the manufacturer. Under this responsibility it is to the discretion of the notified body to witness these tests and/or check these calculations.

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 I.C shall be carried out by the craft manufacturer, or on his behalf, under the responsibility of a notified body chosen by the manufacturer.

Recreational craft with inboard propulsion engines, or with stern drive engines without integral exhaust, and personal watercraft must use the harmonised standard (EN ISO 14509) for measurement of noise emissions (except for recreational craft with inboard propulsion engines or stern drive engines without integral exhaust in the case when one of the two alternative methods referred to in Annex I, part C can be applied). If the manufacturer applies for conformity assessment according to module Aa these noise emission measurement tests must be conducted under the responsibility of a notified body. The noise emission measurement tests may be carried out by the manufacturer and witnessed and/or checked by the notified body. Alternatively the tests may be conducted by another party appointed by the manufacturer and witnessed and/or checked by the notified body. Another party appointed by the manufacturer could be the notified body itself, if that body has been assigned by a Member State for this purpose.

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 I.C 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.’;

For outboard engines and stern drive engines with integral exhaust, the noise emission tests must be conducted in accordance with the harmonised standard (EN ISO 14509) using ‘standard craft’ as defined by the standard. If the manufacturer applies for conformity assessment according to module Aa these tests must be carried out under the responsibility of a notified body. The noise emission tests may be carried out by the craft manufacturer and witnessed and/or checked by the notified body. Alternatively the test may be conducted by another party appointed by the manufacturer and witnessed and/or checked by the notified body. Another party appointed by the manufacturer could be the notified body itself, if that body has been assigned by a Member State for this purpose.

The tests may be conducted on one engine from each engine family (definition 3.g) in the manufacturer’s range, in which case the engine selected must be chosen to provide noise emission characteristics representative of all engines in that engine family. Where more than one engine is tested the average result of the sample and standard deviation shall be calculated according to Annex XVII to determine compliance.

ANNEX VII: EC TYPE-EXAMINATION (MODULE B)

The text of Annex VII for EC type-examination is not amended, but this module is now also available for conformity assessment of personal watercraft against the design and construction requirements, and for assessing conformity of propulsion engines with the exhaust emission requirements.

Where this module is selected by an engine manufacturer for assessing the compliance of his engines with the exhaust emission requirements, the specimen chosen as “a specimen representative of the production envisaged” for application of this module, should be one ‘parent engine’ from each engine family (definition 3,g) in the manufacturer’s range. Each parent engine selected must be chosen to provide exhaust gas emission characteristics representative of all engines in that engine family (note that details on selection of parent engines for exhaust emission tests in general are given in Directive 97/68/EC and EN ISO 8178 - details incorporated in Appendix 4 of this guide). If the parent engine meets the exhaust emission requirements, the engine family it represents is then type-approved in accordance with this Directive, not just the engine model tested. Where an engine is not part of an engine family, it is the individual engine model that is to be type-approved.

AMENDMENTS TO ANNEX VIII: CONFORMITY TO TYPE (MODULE C)

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.’

For application of this addition to module C for engine exhaust emissions, the notified body referred to in the first paragraph shall be the notified body chosen by the manufacturer for the application of EC type-examination (module B) described above.

The reference to ‘an engine taken from the series’ in the second paragraph means an engine taken from the series production of the engine family for an EC type-approved engine family under module B, or an engine taken from the series production of the engine model series where the engine model is not part of an EC-type approved engine family.

AMENDMENTS TO ANNEX X: PRODUCT VERIFICATION (MODULE F)

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.’

The amendment adds a reference to new Annex XVII (statistical method) for statistical verification of a sample with respect to exhaust emissions. It should be noted that also in module Aa (Annex VI) and module C (Annex VIII) a reference is made to this statistical method for verification of compliance with the exhaust emission requirements by an engine family.

AMENDMENTS TO ANNEX XIII: TECHNICAL DOCUMENTATION SUPPLIED BY THE MANUFACTURER

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)

Requirement (g) is new for exhaust emissions. The test report should record all exhaust emissions measured in accordance with the harmonised standard EN 8178, the duty cycle and the reference fuels used to demonstrate compliance with the exhaust emission limits.

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

Requirement (h) is new for noise emissions. The test report should record all noise emissions measured in accordance with the tests defined in harmonised standard EN 14509 to demonstrate compliance with the noise emission limits. Alternatively if compliance with these limits is demonstrated by means of the certified reference boat concept, the technical documentation has to contain all data on the key design parameters of the craft for which compliance with the noise limits is to be demonstrated.

**AMENDMENTS TO ANNEX XIV:
MINIMUM CRITERIA TO BE TAKEN INTO ACCOUNT BY MEMBER
STATES FOR THE NOTIFICATION OF BODIES**

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.'

The amendment 1a strengthens the requirements for independence of notified bodies.

AMENDMENTS TO ANNEX XV: WRITTEN DECLARATION OF CONFORMITY

15. Annex XV shall be replaced by the following:

Annex XV

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).*

The amendment adds requirements to supply a declaration of conformity with personal watercraft and all engines covered by this Directive and to include this in the owner's manual of the craft, or respectively the engine.

- 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.'*

Inboard engines and stern drive engines without integral exhausts must be accompanied by a declaration of conformity including the above information. These engines are not CE marked with respect to this Directive, but labels may be affixed to the engine to provide information that the engine will comply with the exhaust gas emission requirements of this Directive if properly installed and maintained, provided that any such labels cannot be confused with CE marking. Affixing of such labels cannot be considered as a means of meeting the requirement for a statement by the manufacturer to be included in the declaration of conformity that the engine will meet the exhaust emission requirements.

NEW ANNEX XVI - PRODUCT QUALITY ASSURANCE (MODULE E)

The following annex is new and provides an alternative conformity assessment module always to be used in combination with EC-type approval (Module B) and only when permitted by Article 8 (i.e. not for components and not for noise emissions).

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 re-assessment 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.*

NEW ANNEX XVII - CONFORMITY OF PRODUCTION ASSESSMENT FOR EXHAUST AND NOISE EMISSIONS

The following annex has been added to provide details of the statistical method to be applied to engine samples selected from an engine family for conformity assessment of exhaust and noise emissions under modules Aa, C and F.

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:

$$S^2 = S (x - X)^2 / (n - 1)$$

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)

n	2	3	4	5	6	7	8	9	10
k	0,973	0,613	0,489	0,421	0,376	0,342	0,317	0,296	0,279
n	11	12	13	14	15	16	17	18	19
k	0,265	0,253	0,242	0,233	0,224	0,216	0,210	0,203	0,198

If $n \geq 20$ then $k = 0,860 / \sqrt{n}$.

ARTICLE 2: REVIEW CLAUSE

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.*

This article specifies the next steps to be undertaken by the Commission to investigate the appropriateness of developing proposals for further improving the environmental performance of recreational marine engines.

ARTICLE 3: TRANSPOSITION, IMPLEMENTATION AND TRANSITIONAL ARRANGEMENTS

- 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.*

Article 3.1 specifies the deadlines by which the Member States have to transpose the provisions of the Directive into their national legislation (30 June 2004) and start applying them (as from 1st January 2005).

Article 3.2 specifies the deadlines until which the following transitional provisions may apply. From 1st January 2005 until these deadlines products that do not comply with the provisions of Directive 2003/44/EC may be placed on the market and/or put into service in the territory of a Member State provided that these products comply with the rules that were in force in that territory on the date of entry into force of that Directive (i.e. 26th August 2003). If a Member State did not have any rules in place on that date, a product can be placed on the market and/or put into service in the territory of that Member State until the applicable deadline, even if that product does not comply with the provisions of Directive 2003/44/EC. As all Member States had national rules in place transposing the provisions of Directive 94/25/EC, products covered by the scope of that Directive have at least to comply with the requirements of that Directive. After these transitional deadlines no products may be placed on the market and/or put into service unless they do comply with Directive 2003/44/EC.

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: PENALTIES

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: ENTRY INTO FORCE

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

The Directive has been published in the Official Journal N° L214 of 26 August 2003, pages 18 to 35. (See Appendix 2)

ARTICLE 6: ADDRESSEE

This Directive is addressed to the Member States.

APPENDIX 1: PREAMBLE AND JUSTIFICATIONS

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

THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EUROPEAN UNION, Having regard to the Treaty establishing the European Community, and in particular Article 95 thereof,

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.

The first recital states that developments since the adoption of Directive 94/25/EC relating to recreational craft have made it necessary to amend the Directive. The Commission was led to consider this amendment to include environmental aspects following the introduction of national legislation covering exhaust and sound emissions of recreational craft in several Member states. This was most notably seen in Germany, Switzerland, Austria and Sweden.

Member States, industry and users observed that separate national legislations on emissions might constitute an obstacle to the free movement of trade and fragment the internal market. EU harmonisation of emissions limits achieved by amendment of Directive 94/25/EC would ensure a fair and viable trading basis for the sale of recreational marine craft and engines throughout Europe.

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

The second recital explains why personal watercraft which were excluded from Directive 94/25/EC are now included within the scope of this Directive. This was necessary as some of the separate national legislations on emissions referred to above also covered personal watercraft.

(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.

The third recital identifies the elements of exhaust emissions, which together with noise emissions, may be harmful to 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.

The fourth recital notes that the exhaust and sound emissions produced by recreational craft and personal watercraft and their engines are 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 provisions, which are already the subject of the Council Resolution of 3 December 1992 concerning the relationship between industrial competitiveness and environmental protection⁽⁵⁾, were taken up in the conclusions of the Industry Council of 29 April 1999.

The fifth recital states that in accordance with the common policy it is necessary to integrate environmental protection requirements into the various Community activities.

(6) Laws, regulations and administrative provisions are in force in some Member States limiting noise and exhaust emissions from recreational craft and engines in order to protect human health, the environment and, where appropriate, domestic animal health. Those measures differ and are likely to affect the free movement of such products and constitute barriers to trade within the Community.

The sixth recital notes that the national laws in force limiting noise and exhaust emissions from recreational craft and engines are likely to lead to barriers to trade within the Community.

(7) In the framework of Directive 98/34/EC of the European Parliament and of the Council of 22 June 1998 laying down a procedure for the provision of information in the field of technical standards and regulations and of rules on Information Society services⁽⁶⁾ Member States have notified draft national regulations aimed at reducing noise and exhaust emissions from the engines of recreational craft. Such technical regulations are considered, like the national provisions already in force, to be likely to affect the free movement of such products or to create obstacles to the proper functioning of the internal market. It is therefore necessary to draw up a binding Community instrument.

The seventh recital refers to notification of proposed national regulations limiting noise and exhaust emissions from the engines of recreational craft as further justification for drawing up Community regulations.

(8) The harmonisation of national laws is the only way to abolish such barriers to trade and unfair competition found in the internal market. The objective of limiting noise and exhaust emissions cannot be satisfactorily met by the Member States individually. The measures provided for in this Directive lay down only the essential requirements for the free movement of recreational craft, personal watercraft and all the types of engines to which this Directive applies.

The eight recital justifies harmonisation by means of the Directive, the transpositions of which replace the former national provisions, on the grounds that this is the only way in which to remove the barriers to trade.

(9) These measures are in accordance with the principles set out in the Council Resolution of 7 May 1985 on a new approach to technical harmonisation and standards⁽⁷⁾, with reference being made to harmonised European standards.

This paragraph explains that the measures introduced by the Directive are in line with the principles of the “new approach” by using references to harmonised standards.

(10) 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.

This paragraph clarifies that the new exhaust and noise emission requirements will apply to inboard, outboard or stern drive engines of recreational craft and to personal watercraft in order to ensure protection of human health and the environment.

It also states that the provisions will extend to the modification of engines for exhaust emissions and conversion of recreational craft with inboard propulsion engines or stern drive engines without integral exhausts. The extent of modifications permitted without invoking these provisions is defined in the Directive and the latter provision on compliance with noise emissions in case of craft conversion applies only if the craft is placed on the market within five years following the conversion.

(11) 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.

The eleventh recital specifies the exhaust emission gases that are limited by the Directive and that the noise limits depend on the power of the engines and the number and type of engines on board.

(12) 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.

Recital 12 requests that Member States should encourage the use of synthetic biodegradable lubrication oils for marine engines to further reduce the possibility of water pollution resulting from oil spillage.

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

Recital 13 refers to the Declaration of Conformity (Annex XV) and the respective owner's manuals in which it has to be included (Annex I.A.2.5 for recreational craft and personal watercraft and Annex I.B.4 for propulsion engines). In these Declarations of Conformity, conformity with the noise or exhaust emissions or both is declared, including the references to the harmonised standards used in relation to which conformity is declared.

(14) 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.

The fourteenth recital refers to the role of harmonised standards to facilitate the task of proving compliance with the essential requirements, and indicates the need for harmonised standards to cover emissions from the recreational craft and personal watercraft (and design and construction of personal watercraft).

(15) 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 ⁽⁸⁾.

The fifteenth recital justifies the adoption of different procedures for the assessment of compliance with the essential requirements depending on the level of risk inherent in the

craft. The amendments to the Directive increase the number of options available for conformity assessment.

(16) 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⁽⁹⁾ and engines type-approved according to Directive 88/77/EEC⁽¹⁰⁾ 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.

Recital 16 refers to the extension of the requirement for CE marking under this Directive to personal watercraft, outboard engines and stern drive engines with integral exhaust.

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

The amendments to the Directive increase the number of options available for conformity assessment.

(18) 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.

Recital 18 refers to amendments made by this Directive to some existing essential requirements of Directive 94/25/EC, mainly for clarification, as deemed necessary in the light of experience gained since implementation of Directive 94/25/EC.

(19) 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.

Recital 19 refers to the Directive's requirement for the Commission to monitor developments in engine technology. From this follows the requirement that the Commission will report to the European Parliament and the Council within two years on possible amendment to the emission requirements and possible in-use compliance testing of engines.

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

Recital 20 refers to the provisions of Article 6a requiring to introduce a Regulatory Committee to adapt certain provisions of the Directive in the light of technical progress.

(21) 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).

(22) 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,

The final recital explains the need for the transitional arrangement provided for in Article 3.

HAVE ADOPTED THIS DIRECTIVE:

-
- (1) OJ C 62 E, 27.2.2001, p. 139 and OJ C 51 E, 26.2.2002, p. 339.
 - (2) OJ C 155, 29.5.2001, p. 1.
 - (3) Opinion of the European Parliament of 5 July 2001 (OJ C 65 E, 14.3.2002, p. 310), Council Common Position of 22 April 2002 (OJ C 170 E, 16.7.2002, p. 1) and Decision of the European Parliament of 26 September 2002 (not yet published in the Official Journal). European Parliament Decision of 14 May 2003 and Council Decision of 19 May 2003.
 - (4) OJ L 164, 30.6.1994, p. 15.
 - (5) OJ C 331, 16.12.1992, p. 5.
 - (6) OJ L 204, 21.7.1998, p. 37. Directive as amended by Directive 98/48/EC (OJ L 217, 5.8.1998, p. 18).
 - (7) OJ C 136, 4.6.1985, p. 1.
 - (8) OJ L 220, 30.8.1993, p. 23.
 - (9) OJ L 59, 27.2.1998, p. 1. Directive as amended by Commission Directive 2001/63/EC (OJ L 227, 23.8.2001, p. 41).
 - (10) OJ L 36, 9.2.1988, p. 33. Directive as last amended by Commission Directive 2001/27/EC, (OJ L 107, 18.4.2001, p. 10).

APPENDIX 2: TEXT OF DIRECTIVE 2003/44/EC AMENDING DIRECTIVE 94/25/EC

The text of Directive 2003/44/EC can be downloaded in all official languages at the following URL:

http://europa.eu.int/smartapi/cgi/sga_doc?smartapi!celexapi!prod!CELEXnumdoc&lg=EN&numdoc=32003L0044&model=guichett

APPENDIX 3: STANDARDS HARMONISED UNDER DIRECTIVE 2003/44/EC AMENDING DIRECTIVE 94/25/EC

Note: The information contained in this list is a compilation of the references of standards that have been published in the Official Journal of the European Union as harmonised standards in support of Directive 2003/44/EC, or are candidate standards intended for harmonisation. This list contains only the harmonised standards supporting the new requirements of Directive 2003/44/EC, i.e. with regard to PWCs, exhaust and noise emissions. Standards that support the design and construction requirements of Directive 94/25/EC are listed in the 2nd Edition of the Guide to Application of Directive 94/25/EC, including those standards that support design and construction requirements that are amended by this Directive.

Although these lists of standards were updated before publication of the relevant application guide, they may not stay complete over time. For updates on publication of harmonised standards in the Official Journal, please consult the Commission's website at following URL:

<http://europa.eu.int/comm/enterprise/newapproach/standardization/harmstds/reflist/reccraft.html>

This list does not have any legal validity; in accordance with article 5 of the Directive only publication in the Official Journal produces legal effect for the standards to be considered as harmonised.

<i>Standard reference</i>	<i>Title</i>	<i>Publication in the OJEU (*)</i>
EN ISO 8178-1:1996	Reciprocating internal combustion engines – Exhaust emission measurement – Part 1: Test-bed measurement of gaseous and particulate exhaust emissions.	To be published
EN ISO 14509:2000 and Amendment 1	Small craft - Measurement of sound pressure level of airborne sound emitted by powered recreational craft	C107, 03.05.2005
prEN ISO 14509-2	Small craft - Airborne sound emitted by powered recreational craft – Part 2: Sound assessment using reference craft	To be published
EN ISO 13590:2003	Personal watercraft – Construction and system installation requirements	C5, 08.01.2005
EN ISO 13590:2003/AC:2004		C107, 03.05.2005

(*) *Date from which compliance with the national standard adopted pursuant to the adoption of this harmonised standard enables to invoke, subject to the provisions of article 5 of the Directive, a presumption of compliance with the essential requirements the national standard covers.*

APPENDIX 4: ENGINE FAMILY AND PARENT ENGINES

The following notes on parameters of an engine family and selection of parent engines are taken from Directive 97/68/EC relating to the engine emissions of non-road mobile machinery with regard to type approval.

“6. PARAMETERS DEFINING THE ENGINE FAMILY

The engine family may be defined by basic design parameters which must be common to engines within the family. In some cases there may be interaction of parameters. These effects must also be taken into consideration to ensure that only engines with similar exhaust emission characteristics are included within an engine family.

In order that engines may be considered to belong to the same engine family, the following list of basic parameters must be common:

6.1 Combustion cycle:

- 2 cycle
- 4 cycle

6.2 Cooling medium:

- air
- water
- oil

6.3 Individual cylinder displacement:

- engines to be within a total spread of 15%
- number of cylinders for engines with after-treatment device

6.4 Method of air aspiration

- naturally aspirated
- pressure charged

6.5 Combustion chamber type/design:

- pre-chamber
- swirl chamber
- open chamber

6.6 Valve and porting - configuration, size and number:

- cylinder head
- cylinder wall
- crankcase

6.7 Fuel system

- pump-line injector
- in-line pump
- distributor pump
- single element
- unit injector

6.8 Miscellaneous features

- exhaust gas recirculation
- water injection/emulsion
- air injection
- charge cooling system

6.9 Exhaust after-treatment

- oxidation catalyst
- reduction catalyst
- thermal reactor
- particulates trap

7. CHOICE OF THE PARENT ENGINE

7.1 The parent engine of the family shall be selected using the primary criteria of the highest fuel delivery per stroke at the declared maximum torque speed. In the event that two or more engines share this primary criteria, the parent engine shall be selected using the secondary criteria of highest fuel delivery per stroke at rated speed. Under certain circumstances, the approval authority may conclude that the worst case emission rate of the family can best be characterised by testing a second engine. Thus, the approval authority may select an additional engine for test based upon features which indicate that it may have the highest emission levels of the engines within that family.

7.2 If engines within the family incorporate other variable features which could be considered to affect exhaust emissions, these features must also be identified and taken into account in the selection of the parent engine.”

APPENDIX 5: SPECIFICATIONS OF REFERENCE FUELS

1. TECHNICAL DATA OF THE REFERENCE FUEL TO BE USED FOR TESTING VEHICLES EQUIPPED WITH POSITIVE-IGNITION ENGINES

Fuel type: UNLEADED PETROL

Parameter	Unit	Limits (1)		Test Method	Publication
		Minimum	Maximum		
Research octane number, RON		95,0	-	EN 25164	1993
Motor octane number, MON		85,0	-	EN 25163	1993
Density at 15 °C	kg/m ³	748	762	ISO 3675	1995
Reid vapour pressure	kPa	56,0	60,0	EN 12	1993
Distillation:					
- initial boiling point	°C	24	40	EN-ISO 3405	1988
- evaporated at 100 °C	% v/v	49,0	57,0	EN-ISO 3405	1988
- evaporated at 150 °C	% v/v	81,0	87,0	EN-ISO 3405	1988
- final boiling point	°C	190	215	EN-ISO 3405	1998
Residue	%	-	2	EN-ISO 3405	1998
Hydrocarbon analysis:					
- olefins	% v/v	-	10	ASTM D 1319	1995
- aromatics (2)	% v/v	28,0	40,0	ASTM D 1319	1995
- benzene	% v/v	-	1,0	EN 12177	1998
- saturates	% v/v	-	balance	ASTM D 1319	1995
Carbon/hydrogen ratio		report	report		
Oxidation stability (3)	min.	480	-	EN-ISO 7536	1996
Oxygen content (4)	% m/m	-	2,3	EN 1601	1997
Existent gum	mg/ml	-	0,04	EN-ISO 6246	1997
Sulphur content (5)	mg/kg	-	100	pr. EN-ISO/DIS 14596	1998
Copper corrosion at 50 °C		-	1	EN-ISO 2160	1995
Lead content	g/l	-	0,005	EN 237	1996
Phosphorus content	g/l	-	0,0013	ASTM D 3231	1994

- The values quoted in the specification are "true values". In establishment of their limit values the terms of ISO 4259 "Petroleum products Determination and application of precision data in relation to methods of test" have been applied and in fixing a minimum value, a minimum difference of 2R above zero has been taken into account; in fixing a maximum and minimum value, the minimum difference is 4R (R = reproducibility).
Notwithstanding this measure, which is necessary for statistical reasons, the manufacturer of fuels should nevertheless aim at a zero value where the stipulated maximum value is 2R and at the mean value in the case of quotations of maximum and minimum limits. Should it be necessary to clarify the question as to whether a fuel meets the requirements of the specifications, the terms of ISO 4259 should be applied.
- The reference fuel used to approve a vehicle against the limit values set out in row B of the table in section 5.3.1.4 of Annex I to this Directive shall have a maximum aromatics content of 35% v/v. The Commission will as soon as possible, but no later than 31 December 1999, bring forward a modification to this Annex reflecting the market average for fuel aromatics content in respect of the fuel defined in Annex III of Directive 98/70/EC.
- The fuel may contain oxidation inhibitors and metal deactivators normally used to stabilise refinery gasoline streams, but detergent/dispersive additives and solvent oils must not be added

4. The actual oxygen content of the fuel for the Type I and IV tests shall be reported. In addition the maximum oxygen content of the reference fuel used to approve a vehicle against the limit values set out in row B of the table in section 5.1.3.4 of the Annex I to this Directive shall be 2,3 %. The Commission will as soon as possible, but no later than 31 December 1999, bring forward a modification to this Annex reflecting the market average for fuel oxygen content of the fuel defined in Annex III of Directive 98/70/EC.
5. The actual sulphur content of the fuel used for the Type I test shall be reported. In addition the reference fuel used to approve a vehicle against the limit values set out in row B of the table in section 5.1.3.4 of Annex I to this Directive shall have a maximum sulphur content of 50 ppm. The Commission will as soon as possible, but no later than 31 December 1999, bring forward a modification to this Annex reflecting the market average for fuel sulphur content in respect of the fuel

2. TECHNICAL DATA OF THE REFERENCE FUEL TO BE USED FOR TESTING VEHICLES EQUIPPED WITH A DIESEL ENGINE

Fuel type: **DIESEL FUEL**

Parameter	Unit	Limits (1)		Test Method	Publication
		Min	Max		
Cetane number (2)		52,0	54,0	EN-ISO 5165	1998
Density at 15 °C	kg/m ³	833	837	EN-ISO 3675	1995
Distillation					
- 50% point	°C	245	-	EN-ISO 3405	1988
- 95% point	°C	345	350	EN-ISO 3405	1988
- final boiling point	°C	-	370	EN-ISO 3405	1988
Flash point	°C	55	-	EN 22719	1993
CFPP	°C	-	-5	EN 116	1981
Viscosity at 40 °C	mm ² /s	2,5	3,5	EN-ISO 3104	1996
Polycyclic aromatic hydrocarbons	% m/m	3	6,0	IP 391	1995
Sulphur content (3)	mg/kg	-	300	EN-ISO 14596	1998
Copper corrosion		-	1	EN-ISO 2160	1995
Conradson carbon residue (10 % DR)	% m/m	-	0,2	EN-ISO 10370	1995
Ash content	% m/m	-	0,01	EN-ISO 6245	1995
Water content	% m/m	-	0,05	EN-ISO 12937	2001
Neutralisation (strong acid) number	mg KOH/g	-	0,02	ASTM D 974-95	1998
Oxidation stability (4)	mg/1nl	-	0,025	EN-ISO 12205	1996
New and better method for polycyclic aromatics under development	%m/m	-	-	EN 12916	2000

1. The values quoted in the specification are "true values". In establishment of their limit values the terms of ISO 4259 "Petroleum products Determination and application of precision data in relation to methods of test" have been applied and in fixing a minimum value, a minimum difference of 2R above zero has been taken into account; in fixing a maximum and minimum value, the minimum difference is 4R (R =reproducibility)
Notwithstanding this measure, which is necessary for statistical reasons, the manufacturer of fuels should nevertheless aim at a zero value where the stipulated maximum value is 2R and at the mean value in the case of quotations of maximum and minimum limits. Should it be necessary to clarify the question as to whether a fuel meets the requirements of the specifications, the terms of ISO 4259 should be applied.

2. The range for cetane number is not in accordance with the requirement of a minimum range of 4R. However, in the case of a dispute between fuel supplier and fuel user, the terms in ISO 4259 may be used to resolve such disputes provided replicate measurements, of sufficient number to achieve the necessary precision, are made in preference to single determinations.
3. The actual sulphur content of the fuel used for the Type J test shall be reported. In addition the reference fuel used to approve a vehicle against the limit values set out in row B of the table in section 5.1.3.4 of Annex I to this Directive shall have a maximum sulphur content of 50 ppm. The Commission will as soon as possible, but no later than 31 December 1999, bring forward a modification to this Annex reflecting the market average for fuel sulphur content in respect of the fuel defined in Annex III of Directive 98/70/EC.
4. Even though oxidation stability is controlled, it is likely that shelf life will be limited. Advice should be sought from the supplier as to storage conditions and life

APPENDIX 6: LIST OF NOTIFIED BODIES UNDER DIRECTIVE 2003/44/EC¹

NOTIFIED BODY Name address distinguishing number	Authorised to perform conformity assessment for:								
	Products/scope [relevant article]	Module (relevant Annex)							PCA*
		Aa (VI)	B (VII)	D (IX)	E (XVI)	F (X)	G (XI)	H (XII)	
Germanischer Lloyd AG Vorsetzen 35 D-20459 Hamburg Germany 0098 Tel : +49.40.36.14.96.20 Fax : +49.40.36.11.49.74.35 e-mail: brue@gl-group.com	Recreational craft [art. 1.1.(a) (i)]	X	X	X	X	X	X	X	
	Personal watercraft [art. 1.1.(a) (ii)]	X	X	X	X	X	X	X	
	Components [art. 1.1.(a) (iii)]		X	X		X	X	X	
	Exhaust emissions [art. 1.1.(b) (i) & 1.1.(b) (ii)]		X	X	X	X	X	X	
	Noise emissions [art. 1.1.(c) (i), (ii), (iii) & (iv)]	X					X	X	
TÜV Product Service GmbH Ridlerstrasse 65 D-80339 München Germany 0123 Tel : +49.89.50.08.43.35 Fax : +49.89.50.08.43.35 e-mail: smoesch@tuvps.com	Recreational craft [art. 1.1.(a) (i)]	X	X	X	X	X	X	X	
	Personal watercraft [art. 1.1.(a) (ii)]	X	X	X	X	X	X	X	
	Components [art. 1.1.(a) (iii)]		X	X		X	X	X	
	Exhaust emissions [art. 1.1.(b) (i) & 1.1.(b) (ii)]		X	X	X	X	X	X	
	Noise emissions [art. 1.1.(c) (i), (ii), (iii) & (iv)]	X					X	X	

* PCA = Post Construction assessment procedure according to article 8.1

¹ Although this list has been updated at the release date of this application guide, it may not stay so over time. For a valid updated version of the list, please consult the Commission's website at following URL: http://europa.eu.int/comm/enterprise/maritime/maritime_regulatory/directive_03_44.htm

NOTIFIED BODY Name address distinguishing number	Authorised to perform conformity assessment for:								
	Products/scope [relevant article]	Module (relevant Annex)							PCA*
		Aa (VI)	B (VII)	D (IX)	E (XVI)	F (X)	G (XI)	H (XII)	
Fachausschuss Persönliche Schutzausrüstungen Prüf- und Zertifizierungs- stelle im BG-PRÜFZERT Zwengenbergerstrasse 68 D-42781 Erkrath 0299 Tel : +49 21.29.576.0 Fax : +49.21.29.576.99 e-mail: peter.heffels@zs.bg23.bgnet.de	Recreational craft [art. 1.1.(a) (i)]	X	X			X	X		
	Personal watercraft [art. 1.1.(a) (ii)]	X	X			X	X		
	Components [art. 1.1.(a) (iii)]		X			X	X		
	Exhaust emissions [art. 1.1.(b) (i) & 1.1.(b) (ii)]								
	Noise emissions [art. 1.1.(c) (i), (ii), (iii) & (iv)]	X						X	
ANCCP – Agenzia Nazionale Certificazione Componenti e Prodotti S.R.L. Via Rombon, 11 I-20134 Milano 0302 Tel : +39 02 2104071 Fax : +39 02 210407218 e-mail:	Recreational craft [art. 1.1.(a) (i)]	X	X	X	X	X	X	X	
	Personal watercraft [art. 1.1.(a) (ii)]	X	X	X	X	X	X	X	
	Components [art. 1.1.(a) (iii)]		X	X		X	X	X	X
	Exhaust emissions [art. 1.1.(b) (i) & 1.1.(b) (ii)]		X	X	X	X	X	X	
	Noise emissions [art. 1.1.(c) (i), (ii), (iii) & (iv)]	X						X	X
Instituto Giordano S.P.A. Via Rossini, 2 I-47041 Bellaria Igea Marina (RN) 0407 Tel : +39 0541 343030 Fax : +39 0541 345540 e-mail:	Recreational craft [art. 1.1.(a) (i)]	X	X	X	X	X	X	X	
	Personal watercraft [art. 1.1.(a) (ii)]	X	X	X	X	X	X	X	
	Components [art. 1.1.(a) (iii)]		X	X		X	X	X	X
	Exhaust emissions [art. 1.1.(b) (i) & 1.1.(b) (ii)]		X	X	X	X	X	X	
	Noise emissions [art. 1.1.(c) (i), (ii), (iii) & (iv)]	X						X	X

NOTIFIED BODY Name address distinguishing number	Authorised to perform conformity assessment for:								
	Products/scope [relevant article]	Module (relevant Annex)							PCA*
		Aa (VI)	B (VII)	D (IX)	E (XVI)	F (X)	G (XI)	H (XII)	
RINA S.P.A Via Corsica, 12 I-16128 Genova 0474 Tel : +39 010 5385501 Fax : +39 010 5351577 e-mail:	Recreational craft [art. 1.1.(a) (i)]	X	X	X	X	X	X	X	X
	Personal watercraft [art. 1.1.(a) (ii)]	X	X	X	X	X	X	X	
	Components [art. 1.1.(a) (iii)]		X	X		X	X	X	
	Exhaust emissions [art. 1.1.(b) (i) & 1.1.(b) (ii)]		X	X	X	X	X	X	
	Noise emissions [art. 1.1.(c) (i), (ii), (iii) & (iv)]	X					X	X	
SNCH – Société Nationale de Certification et d’Homologation s.à.r.l. B.P. 23 11, rue de Luxembourg L-5201 Sandweiler 0499 Tel : +352-357214-250 Fax : +352-357214-244 e-mail: info@snch.lu	Recreational craft [art. 1.1.(a) (i)]	X	X	X	X	X	X	X	
	Personal watercraft [art. 1.1.(a) (ii)]	X	X	X	X	X	X	X	
	Components [art. 1.1.(a) (iii)]		X	X		X	X	X	
	Exhaust emissions [art. 1.1.(b) (i) & 1.1.(b) (ii)]		X	X	X	X	X	X	
	Noise emissions [art. 1.1.(c) (i), (ii), (iii) & (iv)]	X					X	X	
Lloyd’s Register Quality Assurance GmbH Mönckebergstraße 27 D-20095 Hamburg 0525 Tel : +49.40.328107.240 Fax : +49.40.328107.250 e-mail: hamburg-yacht-service@lr.org	Recreational craft [art. 1.1.(a) (i)]	X	X	X	X	X	X	X	
	Personal watercraft [art. 1.1.(a) (ii)]	X	X	X	X	X	X	X	
	Components [art. 1.1.(a) (iii)]		X	X		X	X	X	
	Exhaust emissions [art. 1.1.(b) (i) & 1.1.(b) (ii)]		X	X	X	X	X	X	
	Noise emissions [art. 1.1.(c) (i), (ii), (iii) & (iv)]	X					X	X	

NOTIFIED BODY Name address distinguishing number	Authorised to perform conformity assessment for:								
	Products/scope [relevant article]	Module (relevant Annex)							PCA*
		Aa (VI)	B (VII)	D (IX)	E (XVI)	F (X)	G (XI)	H (XII)	
VTT Tuotteet ja Tuotantoo (VTT Industrial Systems) PL 1705 FIN-0244 VTT Finland 0537 Tel : +358-9-4561 Fax : +358-9-456815 e-mail:	Recreational craft [art. 1.1.(a) (i)]	X	X	X	X	X	X	X	X
	Personal watercraft [art. 1.1.(a) (ii)]	X	X	X	X	X	X	X	
	Components [art. 1.1.(a) (iii)]		X	X		X	X	X	
	Exhaust emissions [art. 1.1.(b) (i) & 1.1.(b) (ii)]		X	X	X	X	X	X	
	Noise emissions [art. 1.1.(c) (i), (ii), (iii) & (iv)]	X					X	X	
Det Norske Veritas AS (DNV) Veritasveien 1 N 1322 Høvik Norway 0575 Tel : +47.67579900 Fax : +4767579911 e-mail:	Recreational craft [art. 1.1.(a) (i)]	X	X	X	X	X	X	X	X
	Personal watercraft [art. 1.1.(a) (ii)]	X	X	X	X	X	X	X	
	Components [art. 1.1.(a) (iii)]		X	X		X	X	X	
	Exhaust emissions [art. 1.1.(b) (i) & 1.1.(b) (ii)]		X	X	X	X	X	X	
	Noise emissions [art. 1.1.(c) (i), (ii), (iii) & (iv)]	X					X	X	
International Marine Certification Institute (IMCI) Rue Abbé Cuypers 3 B-1040 Bruxelles Belgium 0609 Tel: +32 (0)27416836 Fax: +32(0)27412418 e-mail: info@imci.org	Recreational craft [art. 1.1.(a) (i)]	X	X			X	X	X	
	Personal watercraft [art. 1.1.(a) (ii)]	X	X			X	X		
	Components [art. 1.1.(a) (iii)]		X			X	X		
	Exhaust emissions [art. 1.1.(b) (i) & 1.1.(b) (ii)]		X			X	X		
	Noise emissions [art. 1.1.(c) (i), (ii), (iii) & (iv)]	X					X		

NOTIFIED BODY Name address distinguishing number	Authorised to perform conformity assessment for:								
	Products/scope [relevant article]	Module (relevant Annex)							PCA*
		Aa (VI)	B (VII)	D (IX)	E (XVI)	F (X)	G (XI)	H (XII)	
Nederlands Keuringsinstituut voor Pleziervaartuigen (NKIP) Postbus 65 NL-8500 AB Joure Netherlands 0613 Tel : +31 – 513 48 43 48 Fax : +31 – 513 48 43 43 e-mail: info@nkip.nl	Recreational craft [art. 1.1.(a) (i)]	X	X			X	X		
	Personal watercraft [art. 1.1.(a) (ii)]	X	X			X	X		
	Components [art. 1.1.(a) (iii)]		X			X	X		
	Exhaust emissions [art. 1.1.(b) (i) & 1.1.(b) (ii)]		X			X	X		
	Noise emissions [art. 1.1.(c) (i), (ii), (iii) & (iv)]	X					X		
European Certification Bureau Nederland BV (ECB) Julianaweg 224A NL-1131 NW Volendam Nederland 0614 Tel: +31.299323123 Fax: +31.299323023 e-mail: info@ECB.nl	Recreational craft [art. 1.1.(a) (i)]	X	X			X	X		X
	Personal watercraft [art. 1.1.(a) (ii)]	X	X			X	X		
	Components [art. 1.1.(a) (iii)]		X			X	X		
	Exhaust emissions [art. 1.1.(b) (i) & 1.1.(b) (ii)]		X			X	X		
	Noise emissions [art. 1.1.(c) (i), (ii), (iii) & (iv)]	X					X		
Luxcontrol SA 1, avenue des Terres Rouges BP 349 L-4004 Esch-sur-Alzette Luxembourg 0882 Tel: +352-54 77 11 – 222 Fax: +352 – 54 77 11 -203 e-mail: hom@luxcontrol.com	Recreational craft [art. 1.1.(a) (i)]	X	X	X	X	X	X	X	
	Personal watercraft [art. 1.1.(a) (ii)]	X	X	X	X	X	X	X	
	Components [art. 1.1.(a) (iii)]		X	X		X	X	X	
	Exhaust emissions [art. 1.1.(b) (i) & 1.1.(b) (ii)]		X	X	X	X	X	X	
	Noise emissions [art. 1.1.(c) (i), (ii), (iii) & (iv)]	X					X	X	

NOTIFIED BODY Name address distinguishing number	Authorised to perform conformity assessment for:								
	Products/scope [relevant article]	Module (relevant Annex)							PCA*
		Aa (VI)	B (VII)	D (IX)	E (XVI)	F (X)	G (XI)	H (XII)	
Udicer Nautitest S.A.S. Via riviera del Brenta, 12 I-30032 Fiesso d'Artico (VE) 0966 Tel : +39 041 5161880 Fax : +39 041 5169478 e-mail:	Recreational craft [art. 1.1.(a) (i)]	X	X	X	X	X	X	X	X
	Personal watercraft [art. 1.1.(a) (ii)]	X	X	X	X	X	X	X	
	Components [art. 1.1.(a) (iii)]		X	X		X	X	X	
	Exhaust emissions [art. 1.1.(b) (i) & 1.1.(b) (ii)]		X	X	X	X	X	X	
	Noise emissions [art. 1.1.(c) (i), (ii), (iii) & (iv)]	X					X	X	
AV Technology Limited AV Tech House Birdhall Lane, Cheadle Heath Stockport Cheshire SK3 0XU United Kingdom 1067 Tel: +44 161 491 2222 Fax: +44 161 428 0127 e-mail: alanmatthews@avtechnology.co.uk	Recreational craft [art. 1.1.(a) (i)]								
	Personal watercraft [art. 1.1.(a) (ii)]								
	Components [art. 1.1.(a) (iii)]								
	Exhaust emissions [art. 1.1.(b) (i) & 1.1.(b) (ii)]								
	Noise emissions [art. 1.1.(c) (i), (ii), (iii) & (iv)]	X							
Polski Rejestr Statków S.A. (PRS) al. Gen Józefa Hallera 126 PL-80-416 Gdańsk Poland 1463 Tel: +48.58.3461700 Fax: +48.58.3460392 e-mail: enquiries@vca.gov.uk	Recreational craft [art. 1.1.(a) (i)]	X	X	X	X	X	X	X	X
	Personal watercraft [art. 1.1.(a) (ii)]	X	X	X	X	X	X	X	
	Components [art. 1.1.(a) (iii)]		X	X		X	X	X	
	Exhaust emissions [art. 1.1.(b) (i) & 1.1.(b) (ii)]								
	Noise emissions [art. 1.1.(c) (i), (ii), (iii) & (iv)]	X					X	X	

NOTIFIED BODY Name address distinguishing number	Authorised to perform conformity assessment for:									
	Products/scope [relevant article]	Module (relevant Annex)							PCA*	
		Aa (VI)	B (VII)	D (IX)	E (XVI)	F (X)	G (XI)	H (XII)		
The Vehicle Certification Agency 1 The Eastgate Office Centre Bristol BS5 6XX United Kingdom 1580 Tel: +44 117 951 5151 Fax: +44 117 9524 103 e-mail: enquiries@vca.gov.uk	Recreational craft [art. 1.1.(a) (i)]									
	Personal watercraft [art. 1.1.(a) (ii)]									
	Components [art. 1.1.(a) (iii)]									
	Exhaust emissions [art. 1.1.(b) (i) & 1.1.(b) (ii)]		X	X	X	X	X	X	X	
	Noise emissions [art. 1.1.(c) (i), (ii), (iii) & (iv)]	X						X	X	
Royal Yachting Association (RYA) RYA House Ensign Way Hamble Southampton Hampshire SO31 4YA United Kingdom 1681 Tel: +44 2380604201 Fax: +44 2380604289 e-mail: rcd@rya.org.uk	Recreational craft [art. 1.1.(a) (i)]	X	X					X		X
	Personal watercraft [art. 1.1.(a) (ii)]	X	X					X		
	Components [art. 1.1.(a) (iii)]		X					X		
	Exhaust emissions [art. 1.1.(b) (i) & 1.1.(b) (ii)]									
	Noise emissions [art. 1.1.(c) (i), (ii), (iii) & (iv)]	X							X	

APPENDIX 7: USEFUL ADDRESSES

1. EUROPEAN COMMISSION SERVICES

1.1. ENTERPRISE AND INDUSTRY DIRECTORATE GENERAL, Unit H/1: AEROSPACE, DEFENCE, AND MARITIME INDUSTRIES

Gwenole Cozigou
Head of Unit
200, rue de la Loi
B- 1049 Brussels
Tel.: +32 2 295 66 01
Fax : +32 2 296 70 14
E-mail: Gwenole.Cozigou@cec.eu.int

Mr. Johan Renders
Legislative officer - Desk Officer – recreational craft legislation
200, rue de la Loi
B- 1049 Brussels
Tel.: +32 2 296.99.62
Fax : +32 2 296 70 14
E-mail: Johan.Renders@cec.eu.int

Website:
http://europa.eu.int/comm/enterprise/maritime/maritime_regulatory/rc_introduction.htm

1.2 ENTERPRISE AND INDUSTRY DIRECTORATE GENERAL, Unit C/1: LEGAL ASPECTS LINKED TO THE INTERNAL MARKET:

Mr. Jacques McMillan
Head of Unit
200, rue de la Loi
B- 1049 Brussels
Tel.: +32 2 295 96.68/295 62.96
Fax : +32 2 295 97.84 /295.38.77
E-mail: jacques.mcmillan@cec.eu.int

1.3 ENTERPRISE AND INDUSTRY DIRECTORATE GENERAL, Unit C/2: STANDARDISATION

Mr. Norbert Anselmann
Head of Unit
200, rue de la Loi
B- 1049 Brussels
Tel.: +32 2 299.56.72/295 46 50
Fax : +32 2 296 70 19
E-mail: Norbert.Anselman@cec.eu.int

2. EU MEMBER STATES

Austria:

1. Legal administration and market surveillance authority

Mr. Wolfgang Lentsch

Bundesministerium für Wirtschaft und Arbeit/ Federal Ministry for Economy and Labour

A-1011 Wien, Stubenring 1

Tel.: +43(0).1.71100.5831

Fax: +43(0).1.7142718

e-mail: wolfgang.lentsch@bmwa.gv.at

2. Technical unit

Mr. Bernhard Bieringer

Bundesministerium für Verkehr, Innovation und Technologie / Oberste Schifffahrtsbehörde

Federal Ministry for Transport, Innovation and Technology / Supreme Shipping Authority

A-1030 Wien, Radetzkystraße 2

Tel.: +43(0).1.71162.5904

Fax: +43(0).1.71162.5999

e-mail: bernhard.bieringer@bmvit.gv.at

Belgium:

Vanderstraeten Werner

Expert in Navigation

Federal Public Service Mobility and Transport

Directorate General for Sea Transport

Shipping Inspectorate - Yachting

Perronstraat 6

B-8400 Oostende

Tel. 0032 (0)59 339504

Fax. 0032 (0)59 330729

E-mail: w.vanderstraeten@mobilit.fgov.be

Cyprus:

Czech Republic

Denmark:

Website: www.dma.dk

Estonia:

Finland:

e-mail: boating@fma.fi

France:

Mr. Denis Clerin/ Mr. Christophe Merit
Ministère chargé de la mer
Direction du Transport Maritime, des ports et du littoral
Bureau de la plaisance et des activités nautiques
22 rue Monge
F-75005 Paris
Tél: Clérin: +33.1.40.81.72.71
Tél: Merit: +33 1 44 49 80 44
Fax: +32.1.40.81.71.87
e-mail: denis.clerin@equipement.gouv.fr
christophe.merit@equipement.gouv.fr

Germany:**Greece:****Hungary:****Ireland:****Italy:**

Ministero delle Attività Produttive
Direzione Generale per lo Sviluppo e la Competitività
Ispettorato Tecnico
sig. Franco Celeste
Via Molise 2 00187 Roma
e-mail: franco.celeste@attivitaproduttive.gov.it

Latvia:**Lithuania:****Luxemburg:****Malta:**

Netherlands:

Inspectorate Transport and Water Management
P.O. Box 8634
NL-3009 AP Rotterdam
THE NETHERLANDS
Tél: +31 10 2668588
Fax: +31 10 202 2616
E-mail: Ringo.lakeman@ivw.nl

Poland:**Portugal:**

Mr Vitorino Semeano
Ministério da Economia
Direcção Geral da Indústria
Campus do Lumiar- Edifício O
Estrada do Paço do Lumiar 1649 -038
LISBOA - PORTUGAL
Tel (00351) 217919100
Fax(00351) 217102114
É-mail: vitorino.semeano@dgcc.pt

Slovenia:**Slovak Republic:****Spain:****Sweden:**

Sjöfartsverket
Sjöfartsinspektionen
SE-601 78 Norrköping
e-mail: inspektion@sjofartsverket.se

United Kingdom:

Website: www.dti.gov.uk/strd/recreat.htm

3. EEA MEMBER STATES:

Iceland:

Norway:

4. RECREATIONAL SECTORAL GROUP (RSG)

Technical Secretariat,
c/o BALance Technology Consulting GmbH
Contrescarpe 33,
D-28203 Bremen, Germany
Tel: +49 421 335170,
Fax: +49 421 3351711
URL: <http://www.rsg.be>
e-mail: rsg@balance-bremen.de

5. EUROPEAN STANDARDISATION ORGANISATIONS

CEN

Central Secretariat
36, rue de Stassart
B- 1050 Brussels
Tel: +32 2 550 08 11
Fax: +32 2 550 08 19

APPENDIX 8: ABBREVIATIONS

dB	Decibel
CE	European Conformity marking
CIN	Craft identification Number
CO	Carbon monoxide (emission component)
D	Displacement
DOC	Declaration of Conformity
EEA	European Economic Area
EC	European Communities
EN	European standard
EU	European Union
F_n	Froude number
HC	Hydrocarbons (emission component)
hp	Horsepower
ISO	International Standardisation Organisation
kW	kilowatt
L_h	length of the hull
L_{wl}	waterline length
$L_{pAS\ max}$	maximum sound pressure level in dB
NO_x	Oxides of nitrogen (emission component)
OJ	Official Journal of the European Communities
P/D	Power displacement ratio
P_N	Rated engine power at rated speed
PT	Particulates (emission component)
PWC	Personal watercraft
RCD	Recreational Craft Directive
RIB	Rigid hull inflatable boat
RSG	Recreational Craft Sectoral Group
V	speed in knots

**APPENDIX 9: PROVISIONS OF DIRECTIVE 94/25/EC THAT HAVE
BEEN AMENDED BY DIRECTIVE 2003/44/EC**

Directive 94/25/EC	Relevant provision under Directive 2003/44/EC
Article 1.1 (scope)	Article 1.1 (a)
Article 1.2 (definition of recreational craft)	Article 1.3 (a)
Article 1.3 (exclusions)	Article 1.2 (a)
Article 4.1 (free movement of products)	Article 4.1
Article 4.2 (free movement of partly completed boats)	Article 4.2
Article 4.3 (free movement of components)	Article 4.3
Article 4.4 (trade fairs, exhibitions, etc.)	Article 4.5
Article 4.5 (CE mark covering other directives)	Article 4.6
Article 7.1 (safeguard clause)	Article 7.1
Article 7.3 (non-compliant CE-marked products)	Article 7.3
Article 8 (choice of conformity assessment modules)	Article 8.1
Article 8.1 (for categories A and B)	Article 8.2 (a)
Article 8.2 (for category C)	Article 8.2 (b)
Article 8.3 (for category D)	Article 8.2 (c)
Article 8.4 (for components)	Article 8.2 (e)
Article 10 (1) (CE marking)	Article 10 (1)
Article 10 (2)	Article 10 (2)
Article 10 (3)	Article 10 (3)
Annex I.1 (boat design categories)	Annex I.A.1 (boat design categories A and D changed)
Annex I.2 .1 (hull identification)	Annex I.A.2.1 (changed into craft identification)
Annex I.2.2, 4 th indent (maximum recommended load on builder's plate)	Annex I.A.2.2, 4 th indent
Annex I.3.6 (maximum recommended load as marked on builder's plate)	Annex I.A.3.6
Annex I.5.2.2 (fuel tanks)	Annex I.A.5.2.2
Annex I.5.6.2 (fire-fighting equipment)	Annex I.A.5.6.2
Annex I.5.8 (discharge prevention)	Annex I.A.5.8
Annex II.4 (fuel tanks and fuel hoses)	Annex II.4
Annex VI	Annex VI.A
Annex XIII	Annex XIII
Annex XIV.1	Annex XIV.1
Annex XV	Annex XV