

**Väikelaevad. Mootoriga töötavate  
lõbusõidulaevade tekitatud õhumüra.  
Osa 2: Müratugevuse hindamine  
etalonlaeva abil**

Small craft - Airborne sound emitted by powered  
recreational craft - Part 2: Sound assessment using  
reference craft

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN ISO 14509-2:2006 sisaldab Euroopa standardi EN ISO 14509-2:2006 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 21.12.2006 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN ISO 14509-2:2006 consists of the English text of the European standard EN ISO 14509-2:2006.</p> <p>This document is endorsed on 21.12.2006 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p><b>Käsitlusala:</b></p> <p>This part of ISO 14509 specifies the procedures to assess sound emission of powered monohull recreational craft of up to 24 m length according to one of the two alternative methods defined in Annex A and Annex B. This part of ISO 14509 is not applicable for the type testing of outboard motors and of stern drives with integral exhaust systems.</p>	<p><b>Scope:</b></p> <p>This part of ISO 14509 specifies the procedures to assess sound emission of powered monohull recreational craft of up to 24 m length according to one of the two alternative methods defined in Annex A and Annex B. This part of ISO 14509 is not applicable for the type testing of outboard motors and of stern drives with integral exhaust systems.</p>
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ICS 17.140.30, 47.080

Võtmesõnad:

ICS 47.080; 17.140.30

English Version

**Small craft - Airborne sound emitted by powered recreational craft - Part 2: Sound assessment using reference craft (ISO 14509-2:2006)**

Petits navires - Bruit aérien émis par les bateaux de plaisance motorisés - Partie 2: Évaluation du bruit à l'aide de bateaux de référence (ISO 14509-2:2006)

Kleine Wasserfahrzeuge - Von motorgetriebenen Sportbooten abgestrahlter Luftschall - Teil 2: Beurteilung der Schallemission mittels Referenzbooten (ISO 14509-2:2006)

This European Standard was approved by CEN on 28 October 2006.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.



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COMITÉ EUROPÉEN DE NORMALISATION  
EUROPÄISCHES KOMITEE FÜR NORMUNG

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## Foreword

This document (EN ISO 14509-2:2006) has been prepared by Technical Committee ISO/TC 188 "Small craft" in collaboration with Technical Committee CEN/SS T01 "Shipbuilding and maritime structures", the secretariat of which is held by CMC.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by May 2007, and conflicting national standards shall be withdrawn at the latest by May 2007.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For relationship with EU Directive(s), see informative Annex ZA, which is an integral part of this document.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

## Endorsement notice

The text of ISO 14509-2:2006 has been approved by CEN as EN ISO 14509-2:2006 without any modifications.

**ANNEX ZA**

(informative)

**Relationship between this European Standard and the Essential Requirements of EU Directive 94/25 EC as amended by Directive 2003/44/EC**

This European Standard has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association to provide a means of conforming to Essential Requirements of EU Directive 94/25/EC as amended by Directive 2003/44/EC.

Once this standard is cited in the Official Journal of the European Communities under that Directive and has been implemented as a national standard in at least one Member State, compliance with the normative clauses of this standard given in Table ZA.1 confers, within the limits of the scope of this standard, a presumption of conformity with the corresponding Essential Requirements of that Directive and associated EFTA regulations.

**Table ZA.1 — Correspondence between this European Standard and Directive 94/25/EC as amended by Directive 2003/44/EC**

Clause(s)/Sub-clause(s) of this European Standard	Essential Requirements (ERs) of EU Directive 94/25/EC as amended by Directive 2003/44/EC	Qualifying remarks/Notes
All clauses	Annex I, C, Clause 1.4	

**WARNING:** Other requirements and other EU Directives may be applicable to the products falling within the scope of this standard.

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**Small craft — Airborne sound emitted  
by powered recreational craft —**

**Part 2:  
Sound assessment using reference craft**

*Petits navires — Bruit aérien émis par les bateaux de plaisance  
motorisés —*

*Partie 2: Évaluation du bruit à l'aide de bateaux de référence*



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## Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 14509-2 was prepared by Technical Committee ISO/TC 188, *Small craft*.

ISO 14509 consists of the following parts, under the general title *Small craft — Airborne sound emitted by powered recreational craft*:

- *Part 1: Pass-by measurement procedures*
- *Part 2: Sound assessment using reference craft*

The following part is under preparation:

- *Part 3: Sound assessment using calculation and measurement procedures*

## Introduction

The development of this part of ISO 14509 became necessary in order to provide an assessment procedure which would satisfy the needs of the European Union Directive 2003/44/EC (Amendment to Directive 94/25/EC). The reason for the inclusion of this type of assessment procedure in the Directive is to try to minimize the economic impact of the Directive on the boating industry, in particular small European boat builders, while still providing an environmental benefit to the community through lower sound levels.



# Small craft — Airborne sound emitted by powered recreational craft —

## Part 2: Sound assessment using reference craft

### 1 Scope

This part of ISO 14509 specifies the procedures to assess the maximum sound emission of powered mono-hull recreational craft of up to 24 m length according to one of the two alternative methods defined in Annex A and Annex B.

This part of ISO 14509 is not applicable for the type testing of outboard motors and of stern drives with integral exhaust systems.

### 2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 8665, *Small craft — Marine propulsion reciprocating internal combustion engines — Power measurements and declarations*

ISO 8666:2002, *Small craft — Principal data*

ISO 14509-1:—<sup>1)</sup>, *Small craft — Airborne sound emitted by powered recreational craft — Part 1: Pass-by measurement procedures*

IEC 60942, *Electroacoustics — Sound calibrators*

IEC 61672-1, *Electroacoustics — Sound level meters — Part 1: Specifications*

### 3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

#### 3.1

##### **recreational craft**

any craft, regardless of the means of propulsion, intended to be used for sports and leisure purposes

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1) To be published.