

To: Director of Standards Development, CEN Management Centre

From: Paul Handley, Consultant for Directive 94/25/EC, Recreational Craft

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CEN Report for period May to August 2004

This report summarises the activity of the CEN Consultant for the Recreational Craft Directive (RCD) during the period from 1st May 2004 to 31st August 2004 and includes comments on the current status of all RCD mandated standards. This is the first report for the contract period 1st May 2004 to 30th April 2005.

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1. Summary of activities and general issues arising

The work during the period has included administration and monitoring of the CEN/ISO recreational craft programme in liaison with the working groups of ISO/TC 188 (WGs), the TC188 Secretariat, ICOMIA, RSG, ADCO, Commission, CEN MC and CEN TC 15. I have completed several assessments for CEN MC of standards under Enquiry, attended WG meetings and other relevant meetings as summarised below, liaised with WG members, prepared draft Annex ZAs for standards and provided information on the Directive and standards as required.

A conciliation meeting was held in Brussels with representatives of CEN TC 15, CEN MC and the Commission to give further consideration to action to be taken with respect to the draft navigation light standard prEN 14744 *Inland and sea-going vessels – Navigation lights*, noting the overlap of the standard with the RCD mandated standard prEN ISO 16180 *Small craft – Electric navigation lights*. The meeting considered the comments and recommendations in my report on prEN ISO 14744 of 2nd February 2004 and the response to these from CEN TC 15. Advice was also received from the Commission representative on amendments that could be made to the standard so that it might be possible for it to support the Marine Equipment Directive and Inland Waterways Directive.

It was concluded that in order to make progress the standard should be amended to separate the requirements of Colreg, CEVNI and Rhine River regulations, which were combined in the draft document. At the request of CEN MC I prepared a report for CEN TC 15 to outline a possible approach to achieve this by appending an annex to specify requirements of the standard that would not apply when it was required to comply with Colreg only, with a separate annex to identify the same for the CEVNI regulations. CEN TC 15 have subsequently amended the standard with the addition of annexes covering some of these points.

A meeting of WG 28 was attended in London to give further consideration to Enquiry comments made for the revision of EN ISO 14509 *Measurement of sound of recreational craft*, the sound pass-by measurement test for RCD noise emissions. Matters discussed included the parameters for standard boats to be used for testing of stern drive engines with integral exhausts.

The draft standard for the reference boat method, prEN ISO 14509-2 *Measurement of airborne sound emitted by powered recreational craft – Part 2: Sound Assessment using reference craft*, was also discussed. Consideration was given to the possibility of reducing the number of parameters to increase the likelihood of finding a suitable reference boat, and the further possibility of providing for standard exhaust systems for boats with inboard engines. Doubt was expressed by some members about the validity of this approach, but it was agreed that this possibility would be investigated. WG 28 have since met again to further consider the draft reference boat standard.

The hull construction working group, WG 18, met to work on prEN ISO 12215-6 *Details of design and construction* prior to circulation as a repeat DIS. A new draft has since been prepared. A separate meeting for a WG 18 subgroup has also been held to develop the new Part 7 *Scantling determination of multihulls*. Drafts prEN ISO 12215 Part 8 *Rudder stocks and bearings* and Part 9 *Appendages and rig attachments* have now been circulated as CDs.

Work is continuing on the assessment of the main part of the hull construction standard, prEN ISO 12215-5 *Design pressures and scantling determination*, which is under repeat Enquiry. A meeting has been proposed for boat builders on the Annex A method for calculating scantlings of sailing boats under 9m length, but this has not yet taken place.

A number of papers have been received on matters to be discussed relating to possible amendment of EN ISO 12217 Part 1 *Stability and buoyancy - Non-sailing boats over 6m length* and Part 2 - *Sailing boats* in response to feedback from recent stability research on multihulls and incidents involving small motor craft. These papers will be considered by a subgroup of WG 22 (see 4 below) and an assessment made on whether it will be necessary to revise the stability standards now to address these issues.

A meeting was held in London to discuss the ORC/ISAF Special Regulations for offshore sailing boats with respect to the requirements of relevant RCD harmonised standards. The ORC/ISAF regulations prescribe requirements for sailing boats that sometimes overlap with the RCD standards, for example requirements relating to cockpit drainage and man overboard prevention. These differences were reviewed and a record made of any areas where divergence exists, and the reasons for the differences. In some cases the ORC representative indicated that they would be likely to amend their requirements in line with the harmonised standards in the future, and in other cases reasons were given for maintaining alternative solutions. In general it was felt that the offshore regulations and harmonised standards were mainly compatible and that there should be continued liaison between the organisations to take account of any future developments and amendments to standards.

The relationship of the ORC offshore sailing categories to the RCD design categories was also discussed and it was noted that the ORC have linked their categories to the nearest

RCD category for stability requirements. This discussion was relevant to other ongoing work that I am carrying out under a sub-contract for the company preparing recommendations for the Commission on possible revisions to the RCD design categories. This work should be followed closely as any amendments to the definitions of the RCD design categories may result in a need to amend a number of the important harmonised standards.

Also relevant to my work for CEN, but carried out under contract for the Commission, is the work I have recently undertaken to propose draft text for the new application guide for Directive 2003/44/EC amending the RCD. I will be making a presentation on this work at a stakeholders information meeting that has been organised by the Commission for the 19th October in Brussels. A presentation will also be made at the meeting on a study on the possibility of future amendment of the sound and exhaust emission as provided for in Directive 2003/44/EC.

I also recently presented a paper on the RCD and its standards at an IMAREST Seminar on ISO standards.

2. Progress with development and assessment of standards

During this period 3 standards were assessed for CEN Enquiry and suggestions and comments with respect to the RCD made for the relevant working groups to consider. The references of three standards are due to be published by the Commission in the Official Journal and for two of them (EN ISO 7840:2004 and EN ISO 8849:2003), which are revisions of previously harmonised standards, the references to the original versions will have to be withdrawn. The total number of adopted standards to 48.

Currently I am assessing prEN ISO 12215-5 *Design pressures and scantling determination* and prEN ISO 10087 *Craft identification – Coding system* (previously *Hull Identification*), both for CEN Enquiry.

Comments on the progress with preparation of all standards supporting the Recreational Craft Directive are given in the notes in Annex C, which summarise progress and assessments. Also appended in Annex D is a table listing the mandated standards against the relevant RCD essential safety requirements, indicating which standards are now harmonised. Where standards are still drafts the stage and year date of the last public draft has been given, e.g. DIS:2001. Recent assessments of standards are listed in the following table (the stage and status given is in accordance with the note below the table).

Assess Date	Work item	PrEN no.	Short title	Stage/ Status	Comments	Harm	Annex Z (Y/N)
2004-5-14	CSTO 1079	prEN ISO 21487	<i>Petrol and diesel fuel tanks</i>	E	Assessed for enquiry, comments made	Y	Y
2004-5-20	CSTO 1081	prEN ISO 8665: 1995 rev	<i>Marine engines – power measurement</i>	E	Assessed for enquiry, comments made	Y	Y
2004-6-8	CSTO 1084	prEN ISO 14590-2 A1	<i>Sound measurement – Reference craft</i>	E	Assessed for enquiry, comments made	Y	Y
2004-7-26		prEN 14744	<i>Inland and sea-going vessels – Navigation lights</i>		Report with proposed annex for prEN 14744 to separate Colreg and CEVNI rules (standard is not mandated).	N	N
2004-8-26		prEN 14744	<i>Inland and sea-going vessels – Navigation lights</i>		Further report commenting on CEN TC 15 proposals to amend prEN 14744 (standard is not mandated)	N	N

Note: Explanation of the Stage/status code

INIT= Informal assessment given upon request of TC during initial drafting of standard before the Enquiry stage

E = Enquiry assessment carried out during the CEN Enquiry at the request of CEN/ CMC. To be used also for parallel Enquiry with ISO or IEC drafts.

ECR = Enquiry assessment supplied at Comments Resolution Meeting to the TC and CMC.

PE = Informal Post-Enquiry Re-assessment on a standard revised after the CEN Enquiry made at request of TC and reported to the TC. More than one re-assessment may be made in a reporting period.

PE2 = Second Informal Post-Enquiry Re-assessment

FY = Positive pre-FV assessment made at the request of CEN/CMC and reported to the CMC.

F2Y = Positive result for the second pre-FV assessment made at the request of CEN/CMC.

FN = Negative result on a pre-FV assessment.

F2N = Negative result on the second pre-Formal Vote assessment.

FF Y = Positive assessment on draft prepared for the second Formal Vote.

FTS = Informal Technical solution agreed with TC/WG and reported to the CMC, after a pre-Formal Vote Negative assessment – awaiting a revised draft from TC.

F2YS = Positive assessment following a previous negative pre-FV assessment.

TS = Technical solution has been agreed between Consultant and TC, following a Negative Assessment

UAP = Draft submitted under the Unique Acceptance Procedure. This code is used as supplementary information to the pre Formal Vote codes.

3. Meetings with contacts and committees

3.1 Summary of meetings attended during the period:

DATE	PLACE	COMMITTEE	PURPOSE	OUTCOME
2004-5-19	Brussels	CEN TC 15 and navigation lights ad-hoc group	Considered prEN 14744 and proposals of CEN TC15 on the navigation light standard with respect to the RCD and other Directives	See comments above
2004-5-25	London	ORC/ISAF Special Regulations (ISAF and ORC Technical managers)	Discussed differences between ISAF Special Regulations for offshore sailing boats and requirements of RCD harmonised standards	See comments above
2004-6-15	London	IMAREST Seminar on RCD and ISO standards	Presented paper on development of ISO standards that support the RCD (harmonised standards)	See above comments
2004-6-17	London	ISO/TC188 WG 28 Sound measurement	Considered the Enquiry comments on prEN ISO 14590 Part 2 <i>Reference boats</i>	Discussed proposals for reference boat method – see comments above
2004-6-18	London	ISO/TC188 WG 18 Hull construction	Discussed further development of prEN ISO 12215 Part 6 <i>Hull construction – Details of design and construction</i>	Part 6 is due to be submitted as a repeat DIS. See also comments above

4 Planned future meetings

A sub-group of ISO/TC188 WG 22 *Stability* will meet in London to examine if the margins relating to the stability offset test of prEN ISO 12217 are adequate for small motor craft and to review the requirements of EN ISO 12217 for stability of multihull sailing boats. The group will also meet to discuss assessment of handling of motor boats in rough seas. It is currently proposing that a handling index (HIX) should be added to EN ISO 12217 Part 1 to assist with the assignment of design categories to offshore motor cruisers. Boat builders and authorities with access to data that could be made available for validation of this proposal should contact the sub-group.

Invitations have been received for the next RSG and ADCO meetings. The next Recreational Craft Sectoral Group (RSG) meeting will be in Miami hosted by the US Coast Guard and National Marine Manufacturers Association. The ADCO will be in London hosted by the DTI.

It may also be of value to organise a meeting of the CEN BT/69 Co-ordinating Committee to review progress with the ISO TC188/CEN BT69 standards programme, in particular with respect to the new standards required to support the amendments to the Directive.

DATE	PLACE	COMMITTEE	PURPOSE	COMMENTS
2004-9-23	London	ISO/TC188 WG 22 Sub-Group	Will continue development of a method of assessment of rough weather handling characteristics for motor boats over 8m length (HIX)	See comments above
2004-9-24	London	ISO/TC188 WG 22 Sub-Group	To review the possible need for amendment of prEN ISO 12217 <i>Stability and buoyancy</i>	See comments above
2004-10-28/29	Miami	Recreational Craft Sectoral Group (RSG)	To consider technical questions relating to the Directive and report on standardisation.	See 5, Requested actions
2004-10-19/20	London	RINA Conference on Small Craft Regulations	To present a paper on the RCD and its harmonised standards and the amendments to the RCD including the new emissions standards.	
2004-11-11/12	London	ADCO	To consider technical questions relating to the Directive and report on standardisation.	An invitation has been received from ADCO to advise them on matters relating to standards.
2004-11-14/15 (tbc)	Amsterdam	ISO/TC188 WG 28 Sound measurement	To consider the Enquiry comments on prEN ISO 16180 <i>Navigation lights</i>	Comments on prEN ISO 16180 from CEN TC 15 will also be addressed
(Date to be confirmed)	Southampton	Small boat scantlings	To review requirements of prEN ISO 12215 Part 5 (currently under Enquiry assessment) with builders of small boats	See comments above
(Date to be confirmed)	Brussels	CEN BT/69 Co-ordinating Committee	To review progress with the ISO TC188/CEN BT69 standards programme	See comments above
(Date to be confirmed)	Brussels	RCD Group of Experts meeting	To consider the amendments to the RCD	See comments above

5 Conclusions and recommended actions

Important matters to be dealt with in the next period include completing the Enquiry assessment for prEN ISO 12215 Part 5 on hull construction, reviewing the stability standard EN ISO 12217 in the light of concerns that have been raised, finalising the reference boat standard prEN ISO 14509-2 and reviewing the Enquiry comments on the navigation light standard prEN ISO 16180.

Annex B lists requested actions.

Paul Handley
 Consultant for Recreational Craft
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ANNEX B

ACTIONS REQUESTED

See Report P= Page S= Section	Request to	Subject	Action requested	CMC Confirmed Y/N *	CMC * = For C
	CEN MC	RSG	To seek approval from the Commission for a mission outside Europe (to USA).		
	CEN MC	EN ISO 8178/EN ISO 14509	To take the necessary action so that the Commission can publish the references of the relevant parts of the exhaust and noise emission harmonised standards in the Official Journal.		

Annex C

Comments summarising the current status of standards mandated to support the Recreational Craft Directive with respect to their stage of production and the relevant essential requirements of the Directive. Numbering and headings are in accordance with the Directive's Annex 2, Essential Safety Requirements.

1. General

EN ISO 8666 *Principal data* is harmonised and the references have been published in the Official Journal.

prEN ISO 11192 *Graphical symbols*. The standard has been distributed as a FDIS with changes to some symbols.

2.1 Hull identification

prEN ISO 10087 *Craft identification - Coding system* is an amended draft of the harmonised standard EN ISO 10087 *Hull identification – Coding system*, intended to make it clear that the code refers to the finished craft, not just the hull.

2.2 Builder's plate

prEN ISO 14945 *Builder's plate* has been approved at Formal Vote. It is therefore harmonised and the references should now be published in the Official Journal.

2.3 Protection from falling overboard and means of reboarding

prEN ISO 15085 *Man overboard prevention and recovery* is harmonised and the references have been published in the Official Journal. An amendment is to be made to amend some requirements that have been found to be unsatisfactory.

2.4 Visibility from the main steering position

EN ISO 11591 *Field of vision* is harmonised. The requirements for transmission of light through windows have been questioned by Norway and will therefore be reviewed to see if a revision of the standard is needed.

2.5 Owner's manual

EN ISO 10240 *Owner's manual* is harmonised but being revised to bring it in line with the essential requirements of the Directive. The revised draft, which incorporates my comments, has been assessed positively prior to Formal vote.

3.1 Structure

EN ISO 12215-1 *Hull construction - scantlings: Materials: Thermosetting resins, glassfibre etc.*, prEN ISO 12215-2 *Materials: Core materials for sandwich construction*, prEN ISO 12215-3 *Materials: Steel, Aluminium and Wood* and prEN ISO 12215-4 *Workshop and manufacturing* are now harmonised and their references have been published in the Official Journal.

prEN ISO 12215-5 *Design pressures and scantling determination* is now under repeat enquiry (second DIS - 5-month vote). The draft includes an annex that provides simple

methods for calculating construction requirements for boats from 2.5m to 12m length of Design Category D or C.

prEN ISO 12215 Part 8 *Rudderstocks* and Part 9 *Appendages and rig attachment* have been circulated as CDs for voting. The WG 18 met London to progress prEN ISO 12215-6 *Details of design and construction* prior to circulation for a repeat DIS. A further WG 18 meeting considered new part 7 *Scantling determination of multihulls*.

3.2 Stability and Freeboard and 3.3 Buoyancy and Flotation

EN ISO 12217-1 *Stability and buoyancy assessment and categorisation - Part 1: Non-sailing boats of 6m length of hull and over*, EN ISO 12217-2 *Part 2: Sailing boats of 6m length of hull and over* and EN ISO 12217-3 *Part 3: Boats less than 6m length of hull* are harmonised and their references have been published in the Official Journal.

The sub-group of WG 22 considering additional requirements for assessment of handling of motor boats in rough seas will meet again in September. A draft assessment method has been prepared and is being validated. The intention is to add these requirements to EN ISO 12217 Part 1 when it is next revised. The sub-group will also consider the stability requirements of EN ISO 12217 Part 1 in response to concerns raised at the ISO TC 188 Plenary meeting – see comments above.

3.4 Openings in hull, deck and superstructure

prEN ISO 12216 *Windows, portlights and hatches etc.* is harmonised and the references have been published in the Official Journal.

EN ISO 9093-1 *Seacocks and through-hull fittings – Part 1: Metallic* and prEN ISO 9093-2 *Part 2: Seacocks and through-hull fittings – Non-metallic* are harmonised and the references have been published in the Official Journal.

3.5 Flooding

EN ISO 11812 *Watertight cockpits and quick-draining cockpits* is harmonised and the references have been published in the Official Journal.

EN ISO 15083 *Bilge pumping systems* is harmonised and its references have been published in the Official Journal.

3.6 Manufacturer's load

EN ISO 14946 *Maximum load capacity* is harmonised and the references have been published in the Official Journal.

3.7 Life raft stowage

No standard, but guidance in CC document and RSG Guidelines.

3.8 Escape

Escape hatches are covered by the fire protection standard in two parts, see 5.6 below.

3.9 Anchoring, mooring, towing

EN ISO 15084 *Anchoring, mooring, towing - strong points* is harmonised and the references have been published in the Official Journal.

4 Handling characteristics

EN ISO 11592 – *Small craft less than 8 m length of hull - determination of maximum propulsion power rating* is harmonised. At the Plenary meeting it was agreed that the USA and Holland would prepare a New Work Item proposal for a new standard to cover handling of boats over 8m length in smooth water.

5.1 Engines and engine spaces

EN ISO 15584 *Inboard petrol engines – Engine-mounted fuel and electrical components* is harmonised. EN ISO 11105 *Ventilation of petrol engine and/or petrol tank compartments* is harmonised.

prEN ISO 16147 *Inboard diesel engines – Engine-mounted fuel and electrical system components* is harmonised and the references have been published in the Official Journal.

EN ISO 8665 *Marine propulsion engines and systems - Power measurement and declarations* is harmonised but under revision to be aligned as a supporting standard of the new core standard for engine power measurement from TC/70, ISO 15550 *Determination and method for the measurement of engine power*. Comments from the Enquiry on the revised standard are due to be considered.

5.2 Fuel systems

EN ISO 10088 *Permanently installed fuel systems and fixed fuel tanks* is harmonised. prEN ISO 21487 *Permanently installed petrol and diesel fuel tanks*, which is being prepared to cover all requirements for fuel tank design and construction, has been assessed for CEN Enquiry and comments made.

EN ISO 8469 *Non-fire resistant fuel hoses* is harmonised. The revision of EN ISO 7840 *Fire resistant fuel hoses* has been approved at Formal Vote and accordingly its references should now be published in the Official Journal (to replace the reference to the previous version).

5.3 Electrical systems

EN ISO 13297 *Electrical systems - Alternating current installations* and EN ISO 10133 *Electrical systems - Extra-low-voltage d.c. installations* are harmonised.

EN 60092 - 507 *Electrical installations in ships - Pleasure craft* is harmonised, applicable to recreational craft with three-phase electrical systems, and the references have been published in the Official Journal.

EN ISO 9097 *Electric fans* is harmonised and its references published in the Official Journal.

The revision of EN ISO 8849 *Electrically operated bilge pumps* has been approved at Formal Vote and accordingly its references should now be published in the Official Journal (to replace the reference to the previous version).

5.4 Steering systems

prEN ISO 8847 *Steering gear - Wire rope and pulley systems* (revision of EN 28847:1989) has been assessed for CEN MC prior to Formal Vote, and a recommendation made that it should proceed to Formal Vote and harmonisation

EN ISO 13929 *Steering gear — Geared link systems*, EN ISO 10592 *Hydraulic steering systems*, EN 28848 *Remote steering systems* and EN 29775 *Remote steering systems for single outboard motors of 15 kW to 40 kW power* are harmonised.

prEN ISO 15652 *Remote steering systems for mini jet boats* has been approved at Formal Vote and accordingly its references should now be published in the Official Journal.

5.5 Gas systems

EN ISO 10239 *Liquefied Petroleum Gas (LPG) systems* is harmonised. The UK has proposed that the standard should be revised soon to add further requirements.

5.6 Fire protection

prEN ISO 9094-1 *Fire protection - craft with a hull length up to 15m* and prEN ISO 9094-2 *Fire protection - craft over 15m* are harmonised and their references have been published in the Official Journal.

EN ISO 14895 *Liquid fuelled galley stoves* is harmonised and its references have been published in the Official Journal.

5.7 Navigation lights

prEN ISO 16180 *Small craft – Electric navigation lights* is being assessed for Enquiry. The draft prepared by WG 19 covers testing and installation requirements for navigation lights. Some of the requirements previously in informative annexes have now been moved into the normative part of the standard. WG 19 plan to meet in Amsterdam in November to review the Enquiry comments.

The standard prEN 14744 *Inland and sea-going vessels – Navigation lights* being prepared by CEN TC15 has been assessed for CEN to be assessed to provide recommendations for splitting the requirements to individually apply to Colreg, CEVNI and the Rhine River – see above comments.

5.8 Discharge prevention

EN ISO 8099 *Toilet waste retention systems* is harmonised

Other mandated standards (including standards likely to be mandated)

Inflatables

EN ISO 6185 *Inflatable boats of less than 8m length - Parts 1, 2 and 3* are harmonised and the references have been published in the Official Journal. Annex ZA of the standards gives information on the appropriate design categories and Part 3 includes requirements for an 'offshore' type equivalent to the Directive's Category B. *Note: Some versions of this standard have been published with a draft version of the Annex Z that*

does not include the correct links to the Directive's categories. Accordingly the Annex Z should be checked to ensure that the latest version is appended.

prEN ISO 6185-4 *Inflatable boats of greater than 8m length* has been circulated as a CD for voting. The requirements of the standard with respect to the RCD have been discussed with the Convenor.

Sound Emissions

EN ISO 14509 *Measurement of sound of recreational craft* has been approved at CEN Formal vote. WG 28 met in London in June to consider comments from the Enquiry vote. An amendment to the standard to permit measurement of sound of sterndrive engines using standard boats, as for outboard engines, has been assessed at Formal Vote, recommending that it be approved.

prEN ISO 14509-2 *Measurement of airborne sound emitted by powered recreational craft – Part 2: Sound Assessment using reference craft*, covering the reference boat concept, is currently under Enquiry. At the WG 28 meeting in London possible ways of improving the reference boat concept were considered (see above).

The Soundboat project members have been conducting sound tests on boats throughout Europe to form a reliable database on boat sound and are trying to develop alternative means for practical assessment of sound emissions.

Exhaust gas emissions

EN ISO 8178 - Parts 1, 2 and 4 *Reciprocating internal combustion engines - Exhaust emission measurement* need to be mandated to eventually be harmonised to support the proposed exhaust gas emission amendments to the Directive.

Personal Watercraft

EN ISO 13590 *Small craft – Personal watercraft - Construction and system installation requirements* has been approved at Formal Vote. The standard covers all the essential requirements of the RCD relevant for PWCs (except for sound and exhaust emissions that will be covered by the relevant harmonised standards as described above) and will be harmonised to support the amendment to the Directive to include PWCs.

Annex D

RCD Standards – August 2004

Table indicating stage of development of standards mandated to be harmonised in support of the recreational craft Directive.

Relevant Clauses of Directive		EN/ISO Standard Number and Title	Harmonised (Publication in the OJEC)
2.	General requirements	EN ISO 8666:2002 Principal data	Harmonised (2003/C118/09)
2.1	Hull identification	EN ISO 10087:1996/A1:2000 Hull identification - Coding system (Rev: DIS 10087)	Harmonised (2001/C138/05)
2.2	Builder's Plate	EN ISO 14945:2004 Builder's plate	Harmonised
		prEN ISO 11192 Graphical symbols	FDIS:2003
2.3	Protection from falling overboard and means of reboarding	EN ISO 15085:2003 Man overboard prevention and recovery	Harmonised (2003/C261/12)
2.4	Visibility from the main steering position	EN ISO 11591:2000 Engine-driven small craft - Field of vision from helm position	Harmonised (2002/C59/06)
2.5	Owner's manual	EN ISO 10240:1996 Owner's manual (Rev:FDIS:2004)	Harmonised (C384 18/12/97)
3.1	Structure	EN ISO 12215-1:2000 Small craft hull construction – Scantlings - Part 1: Materials: Thermosetting resins, glass fibre reinforcement, reference laminate	Harmonised (2001/C138/05)
		EN ISO 2215-2:2002 Scantlings - Materials: Core materials for sandwich construction, embedded materials	Harmonised (C235 1-10/2002)
		EN ISO 12215-3:2002 Scantlings - Materials: Steel, aluminium, wood, other materials	Harmonised (C235 1-10/2002)
		EN ISO 12215-4:2002 Scantlings - Workshop and construction	Harmonised (C235 1-10/2002)
		prEN ISO 12215-5 Scantlings - Design pressures, allowable stresses, scantling determination	DIS2:2004
		prEN ISO 12215-6 Scantlings - Details of design and construction	DIS:2000
		prEN ISO 12215-7 Scantlings – Scantling determination of multihulls	WD
		prEN ISO 12215-8 Scantlings – Rudder stocks and bearings	CD
		prEN ISO 12215-9 Scantlings – Appendages and rig attachments	CD
3.2	Stability and freeboard Buoyancy and flotation	EN ISO 12217-1:2001 Stability and buoyancy – Methods of assessment and categorisation - Part 1: Non-sailing boats over 6 m L_h	Harmonised (C235 1-10/2002)
3.3		EN ISO 12217-2:2001 Stability and buoyancy – Part 2: Sailing boats over 6 m L_h	Harmonised (C235 1-10/2002)
		EN ISO 12217-3:2002 Stability and buoyancy - Part 3: Boats up to and including 6 m L_h	Harmonised (C235 1-10/2002)
3.4	Openings in hull, deck and superstructure	EN ISO 12216:2002 Windows, portlights, hatches, deadlights and doors - Strength and tightness requirements	Harmonised (OJC 318 of 2002-12-19)
		EN ISO 9093-1:1997 Seacocks and through-hull fittings - Part 1: Metallic	Harmonised (2001/C138/05)
		EN ISO 9093-2:2002 Seacocks - Part 2: Non-metallic	Harmonised (OJC 80 of 2003-4-3)

3.5	Flooding	EN ISO 11812:2001 Watertight cockpits and quick-draining cockpits	Harmonised (OJC 91 of 2002-04-17)
		EN ISO 15083:2003 Bilge pumping system	Harmonised (2003/C261/12)
3.6	Manufacturer's maximum recommended load	EN ISO 14946:2001 Maximum load capacity	Harmonised (2002/C59/06)
3.9	Anchoring, mooring and towing	EN ISO 15084:2003 Anchoring, mooring and towing - Strong points	Harmonised (2003/C118/09)
4.	Handling characteristics	EN ISO 11592:2001 Small craft less than 8 m length of hull -Determination of maximum propulsion power rating	Harmonised (2002/C59/06)
		EN ISO 8665:1995/A1:2000 Marine propulsion engines and systems - Power measurements and declarations (Rev: DIS 8665)	Harmonised (2001/C138/05)
5.1.1	Inboard engines	EN ISO 15584:2001 Inboard petrol engines – Engine-mounted fuel and electrical components	Harmonised (OJC 91 of 2002-04-17)
		EN ISO 16147:2002 Inboard diesel engines – Engine-mounted fuel and electrical components	Harmonised (OJC 80 of 2003-4-3)
5.1.2	Ventilation	EN ISO 11105:1997 Ventilation of petrol engine and/or petrol tank compartments (2 nd edition)	Harmonised (C384 18/12/97)
5.1.4	Outboard engines starting	EN ISO 11547:1995/A1:2000 Start-in-gear protection	Harmonised (2001/C138/05)
5.2	Fuel system	EN ISO 10088:2001 Permanently installed fuel systems and fixed fuel tanks	Harmonised (2002/C91/03)
		prEN ISO 21487 Permanently installed petrol and diesel fuel tanks	DIS
		EN ISO 7840:2004 Fire resistant fuel hoses	Harmonised
		EN ISO 8469:1995/A1:2000 Non-fire-resistant fuel hoses (Rev: DIS 8469)	Harmonised (2001/C138/05)
5.3	Electrical system	EN 28846:1993/A1:2000 (ISO 88460:1990) Electrical devices - Protection against ignition of surrounding flammable gas	Harmonised (2001/C138/05)
		EN ISO 8849:2003 Electrically operated bilge pumps	Harmonised
		EN ISO 9097:1994/A1:2000 Electric fans	Harmonised (2001/C138/05)
		EN ISO 10133:2000 Electrical systems - Extra-low-voltage d.c. installations	Harmonised (2002/C59/06)
		EN ISO 13297:2000 Electrical systems - Alternating current installations	Harmonised (2002/C59/06)
		EN 60092 – 507:2000 Electrical installations in ships – Part 507: Pleasure craft (Note: For three-phase systems only)	Harmonised (2003/C137/03)
5.4	Steering system	EN 28847:1989/A1:2000 (ISO 8847) Steering gear - Wire rope and pulley systems (Rev: FDIS 8847)	Harmonised (C255 30/09/95)
		EN 28848:1993/A1:2000 (ISO 8848:1990) Remote steering systems	Harmonised (2001/C138/05)
		EN 29775:1993/A1:2000 (ISO 9775:1990) Remote steering systems for outboard motors of 15 kW to 40 kW power	Harmonised (2001/C138/05)
		EN ISO 10592:1994/A1:2000 Hydraulic steering systems	Harmonised (2001/C138/05)
		EN ISO 13929:2001 Steering gear - Geared link system	Harmonised (2002/C59/06)
		EN ISO 15652:2003 Remote steering systems for inboard mini jet boats	CEN UAP for harmonisation

5.5	Gas system	EN ISO 10239:2000 Liquefied petroleum gas (LPG) systems	Harmonised (2001/C138/05)
5.6	Fire protection	EN ISO 9094-1:2003 Fire protection - Part 1: Craft with a hull length of up to and including 15 m	Harmonised (2003/C163/02)
		EN ISO 9094-2:2002 Fire protection - Part 2: Craft with a hull length of over 15m and up to 24m	Harmonised (2003/C118/09)
		EN ISO 14895:2002 Liquid fuelled galley stoves	Harmonised (2003/C261/12)
5.7	Navigation lights	prEN ISO 16180:2003 Electric navigation lights	DIS
5.8	Discharge prevention	EN ISO 8099:2000 Toilet waste retention systems	Harmonised (2001/C138/05)
Inflatables and RIBs. All clauses where relevant to boat.		EN ISO 6185-1:2001 Inflatable boats of less than 8 m – Part 1: Boats with an engine maximum power rating of 4.5 kW	Harmonised (OJ C 91 of 2002-04-17)
		EN ISO 6185-2:2001 Inflatable boats - Part 2: Boats with an engine maximum power rating of 4.5 kW to 15 kW inclusive	Harmonised (OJ C 91 of 2002-04-17)
		EN ISO 6185-3:2001 Inflatable boats - Part 3: Boats with an engine maximum power rating of 15 kW and greater	Harmonised (OJ C 91 of 2002-04-17)
		prEN ISO 6185-4 Inflatable boats - Part 4: Boats greater than 8m overall length	CD
Amendments to RCD for sound emissions		EN ISO 14509:2000 and Amendment 1 Measurement of sound pressure level of airborne sound emitted by powered recreational craft	To be harmonised
		prEN ISO 14509-2 Measurement of airborne sound emitted by powered recreational craft – Part 2: Sound Assessment using reference craft	DIS
Amendments to RCD to include Personal Watercraft		EN ISO 13590:2003 Personal watercraft – Construction and system installation requirements	To be harmonised

Part of text of CEN Report for period January to April 2004

The following is taken from the CEN Consultant report for the period from 1st January 2004 to 30th April 2004.

1. Summary of activities and general issues arising

The possible overlap of navigation light standards from ISO and CEN has remained an issue. Accordingly I was asked by CEN MC to assess any overlap of prEN 14744 *Inland and sea-going vessels – Navigation lights* with prEN ISO 16180 *Small craft – Electric navigation lights* and to compare the general requirements of the standards. Both standards cover testing and installation requirements of navigation lights for recreational craft under 24m length, although only prEN ISO 16180 is mandated to support the RCD. The scope of prEN 14744, which has been prepared by CEN TC 15, also covers larger commercial vessels. I provided a number of recommendations with this assessment and subsequently received a detailed response from TC 15. The possibility of a further meeting with TC 15 to consider their response and possible action has been discussed with CEN MC and may take place in May.

Two meetings of WG 18 Scantlings were attended during this period to consider draft prEN ISO 12215 Part 8 *Rudder stocks and bearings* and Part 9 *Appendages and rig attachments*. These parts are now being finalised prior to circulation as CDs. The next WG 18 meeting will be in London in June to progress prEN ISO 12215-6 *Details of design and construction* prior to circulation as a repeat DIS. A further WG 18 meeting will be held specifically to consider new Part 7 *Scantling determination of multihulls*.

The main part of the hull construction standard, prEN ISO 12215-5 *Design pressures and scantling determination*, is now under repeat Enquiry with a 5-month voting period to allow time for validation of the construction requirements. As part of this validation a meeting is being organised for boat builders on the simple method for calculating scantlings of small sailing boats (under 9m length) that is included in Annex A of the draft. It is hoped that the boat builders attending the meeting will provide data on the construction of their boats and other feedback that will help with the validation of the standard.

The sub-group of WG 22 *Stability* established to consider possible additional requirements for assessment of handling of motor boats in rough seas met in March in London. A draft method of assessment was prepared at the meeting and will be validated against as many boats as possible over the next few months. Boat builders and authorities with access to data that could be made available for this validation should contact the sub-group. The intention is to add the new requirements to EN ISO 12217 Part 1 when it is next revised.

At the ISO TC 188 Plenary meeting a request was made for a review of EN ISO 12217 Part 1 *Stability and buoyancy - Non-sailing boats over 6m length* in response to accidents in the UK, to examine if the margins relating to the stability offset test are adequate. Comments were also received about the possible need to review the requirements for stability of multihull boats. It was agreed that the sub-group considering handling of motorboats in rough seas would also be responsible for examining the stability requirements with respect to the issues raised. Provisionally it is planned that this sub-group will meet in late June or early July to start this work.

At the Plenary meeting it was also agreed that the USA and Holland would prepare a New Work Item proposal for a new standard to cover handling of fast motor boats over 8m length in smooth water. The new standard could possibly become Part 2 of EN ISO 11592 – *Small craft less than 8 m length of hull - determination of maximum*

2004-3-16	CSTO 1074	prEN ISO 10240 rev	<i>Owner's manual</i>	FY	Assessed positively for Formal Vote	Y	Y
2004-3-23	CSTO 1076	prEN ISO 15652	<i>Mini jet boat steering systems</i>	UAP	Assessed positively for UAP Vote to be harmonised	Y	Y
2004-4-14	CSTO 1084	prEN ISO 14590 A1	<i>Sound measurement – Amendment 1</i>	FY	Assessed positively for Formal Vote	Y	Y
2004-2-4		prEN 14744	<i>Inland and sea-going vessels – Navigation lights</i>		Assessed to examine relevance to RCD, although standard is not mandated (see above).	N	N

Note: Explanation of the Stage/status code

INIT= Informal assessment given upon request of TC during initial drafting of standard before the Enquiry stage

E = Enquiry assessment carried out during the CEN Enquiry at the request of CEN/ CMC. To be used also for parallel Enquiry with ISO or IEC drafts.

ECR = Enquiry assessment supplied at Comments Resolution Meeting to the TC and CMC.

PE = Informal Post-Enquiry Re-assessment on a standard revised after the CEN Enquiry made at request of TC and reported to the TC. More than one re-assessment may be made in a reporting period.

PE2 = Second Informal Post-Enquiry Re-assessment

FY = Positive pre-FV assessment made at the request of CEN/CMC and reported to the CMC.

F2Y = Positive result for the second pre-FV assessment made at the request of CEN/CMC.

FN = Negative result on a pre-FV assessment.

F2N = Negative result on the second pre-Formal Vote assessment.

FF Y = Positive assessment on draft prepared for the second Formal Vote.

FTS = Informal Technical solution agreed with TC/WG and reported to the CMC, after a pre-Formal Vote Negative assessment – awaiting a revised draft from TC.

F2YS = Positive assessment following a previous negative pre-FV assessment.

TS = Technical solution has been agreed between Consultant and TC, following a Negative Assessment

UAP = Draft submitted under the Unique Acceptance Procedure. This code is used as supplementary information to the pre Formal Vote codes.

4. Meetings with contacts and committees

4.1 Summary of meetings attended during the period:

DATE	PLACE	COMMITTEE	PURPOSE	OUTCOME
2004-1-19/20	Dusseldorf	ISO/TC188 WG 18 Hull construction	Progressed drafts prEN ISO 12215 Part 8 <i>Rudders</i> and Part 9 <i>Appendages</i>	See comments above
2004-3-18/19	Helsinki	Recreational Craft Sectoral Group (RSG)	Considered technical questions relating to the Directive and reported on standardisation.	See comments above
2004-3-30	London	ISO/TC188 WG 22 Sub-Group	Continued development of a method of assessment of rough weather handling characteristics for boats over 8m length	See comments above
2004-4-19/20	Paris	ISO/TC188 WG 18 Hull construction	Further development of prEN ISO 12215 Part 8 <i>Rudders</i> and Part 9 <i>Appendages</i> and Part 7 <i>Multihulls</i>	Parts 8 and 9 are due to be submitted as CDs to ISO. See also comments above
2004-4-21	Paris	ISO/TC188 WG 28 Sound measurement	Reviewed prEN ISO 14590 Part 2 <i>Sound assessment using reference boats</i>	To introduce new proposal for reference boat method – see comments above
2004-4-22	Paris	ISO/TC 188 <i>Small craft</i> Plenary meeting	Reviewed progress with all ISO TC 188 standards.	Reported on CEN activity and progress with harmonisation of RCD standards