

## **INTERNATIONAL STANDARDS**

### **E.U. Recreational Craft Directive (RCD)**

A paper by the Chairman, International Regulations Commission

#### **ISO TC 188**

The new RCD (Directive 2013/53/EC) was published on 28 December 2013 and is currently being transposed into the EU Member State legislation, ISO Technical Committee (TC) 188 is responsible for a number of standards that will have to be reviewed to meet the changes in the new RCD Legal Requirements which must be met if a watercraft is to be put into service in the EU.

TC188 convened in Gothenburg in June 2015 where several working groups were in session discussing various standards; 11812 Cockpits, 15085 Man overboard, 13297 Electrics, 12216 Windows and 11591 View from the Helm.

#### **ISO Development**

All standards are reviewed every five years to ensure that they are up to date with technological advances. ISAF contributes to the review of the standards including those associated with the RCD. At all stages ISAF aims to represent the best interests of its members and as with all standards revisions ISAF participates to ensure that new and revised International Standards meet user requirements.

When draft standards are released for consultation, ISAF is notified directly as it has full observer status in TC 188.

#### **Small Craft and RCD Standards Update**

ISO TC 188 is the recreational boating industry's main forum to develop standards for small craft to 24m length of hull. In addition to developing new standards, there is an increasing trend to revise published standards.

On completion, ISO Standards that support the RCD legal requirements are referenced in the Official Journal of the EU (OJEU). This step is referred to as "harmonisation". A harmonised standard provides a presumption of conformity for one or more legal requirements set out in the Directive and the link between a standard and a legal requirement is set out in a dedicated Annex that appears only in the harmonised standard.

TC 188 produces standards that detail requirements of the Recreational Craft Directive and the directive on Personal Protection Equipment (PPE – lifejackets and other equipment).

Other specialised committees in the European Committee for Standardisation (CEN) and ISO also develop standards in support of the RCD, for example: electrical propulsion systems and 3-phase electrical systems.

The standards list provides a full reference of standards applicable to small craft. A standard's prefix reflects their publication as British (BS), European (EN), or International (ISO) standard or a combination of these.

## Recent publications:

ISO 10239	LPG systems
ISO 21487	Permanently installed petrol and diesel fuel tanks
ISO 25197	Electrical/electronic control systems for steering, shift and throttle
ISO 10240:2004 + A1:2015	Owner's manual
ISO 18854: 2015	Reciprocating internal combustion engines exhaust emission measurement. Test-bed measurement of gaseous and particulate exhaust emissions
ISO 16180: 2013	Electric navigation lights – Installation and placement
ISO 18854: 2015	Small craft – Test bed measurement

## Pending Publications:

ISO 10240:2004 Owner's manual (Awaiting Harmonisation)  
 ISO 19009:2015 Electric navigation lights – Performance LED lights

## Under review or development:

ISO 16315	Electrical propulsion systems
ISO 11812:2001	Watertight cockpits and quick- draining cockpits
ISO 15085:2003	Man overboard prevention and recovery
ISO 8666:2002	Principal data
ISO 10087:2006	Craft identification – Coding system
ISO 13297:2014	Electrical systems – AC installations
ISO 10133:2012	Electrical systems – Extra low voltage DC
ISO 9094	Fire protection
ISO 12215-7	Hull construction and scantlings – Part 7: Scantling determination of multihulls
ISO 12215-10	Hull construction and scantlings – Part 10: Rig loads and attachments
ISO 12217-1, 2, 3	Stability and buoyancy
ISO 11591:2011	Field of vision from helm position
ISO 14895:2000	Liquid fuelled galley stoves
ISO 21487:2012	Permanently installed petrol and diesel fuel tanks
ISO 11592-1 (part 1&2)	Small Craft – Determination of maximum propulsion power rating

## Under review by ISO TC 188 Sub-Committee 1 - Personal safety equipment:

ISO 12402 Part2 to 9	Personal floatation Devices
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**Standards Associated with the RCD**

## Abbreviations

ISO International Standard – normally published as EN and BS after publication as ISO  
 WD Working Draft – not for general distribution  
 NP New Project  
 EN European Norm (Standard) \* Indicates standard has been harmonised and meets Essential Safety Requirements  
 BS British Standard  
 FDIS Final Draft International Standard  
 SR Indicates standard is up for systematic review  
 DIS Draft International Standard  
 OJ Official Journal – When published provides Presumption of Conformity  
 CD Committee Draft – not for general distribution

STATUS	NUMBER	YEAR	TITLE	COMMENTS	Date See Note 1
BS EN ISO	*6185-1	2001	Inflatable boats engine power up to 4.5kw	Current	
BS EN ISO	*6185-2	2001	Inflatable boats engine power 4.5kw to 15kw	Current	
BS EN ISO	*6185-3	2014	Inflatable boats engine power 15kw and greater	Current	31/08/2016
BS EN ISO	*6185-4	2011	Inflatable boats 8m to 24m power 15kw and greater	Current	
BS EN ISO	*7840	2013	Fire resistant fuel hoses	Current	24/07/2014
BS EN ISO	*8099	2000	Toilet waste retention systems	Current	
BS ISO	8178 - 1	2006	Reciprocating internal combustion engines. Exhaust emission measurement – Test bed measurement of gaseous and particulate exhaust emissions	International Standard to be Revised	
BS ISO	8178 - 2	2008	Measurement of gaseous and particulate exhaust emissions on site	Current	
BS ISO	8178 - 3	1994	Definitions and methods of measurement of exhaust gas smoke under steady state conditions	Current	

BS ISO	8178 - 4	2007	Test cycles for different engine applications	Current	
BS ISO	8178 - 5	2008	Test fuels	Current	
BS EN ISO	*8469	2013	Non-fire resistant fuel hoses	Current	24/07/2014
BS EN ISO	*8665	2006	Engine power measurement and declaration	Current	
BS EN ISO	*8666	2002	Principal data	Under revision – DIS	
BS EN ISO	*8847	2004	Steering – wire rope and pulley	Current	
BS EN ISO	*8849	2003	Electric bilge pumps	Current	
BS EN ISO	*9093-1	1997	Seacocks and through hull fittings – Metallic	Current	
BS EN ISO	*9093-2	2002	Seacocks and through hull fittings – Non metallic	Current	
BS EN ISO	*9094-1	2003	Fire protection to 15m	Current	
BS EN ISO	*9094-2	2002	Fire protection 15-24m	Current	
ISO	9094		Fire protection	Under revision – FDIS	
BS EN ISO	*9097 + A1	2000	Electric fans/blowers	Current	
BS EN ISO	*10087	2006	Craft identification – Coding system	Under Revision – DIS	
BS EN ISO	*10088	2013	Permanently installed fuel systems and tanks	Current	28/08/2014
BS EN ISO	*10133	2012	Electrical systems – extra low voltage D.C. installations	Current	
BS EN ISO	*10239	2014	Liquefied petroleum gas (LPG) systems	New Standard	21/12/2015

BS EN ISO	*10240	2004	Owner's manual	Current	
BS EN ISO	*10592 + A1	2000	Steering – Hydraulic	Current	
BS EN ISO	*11105	1997	Petrol engine – Ventilation	Current	
BS EN ISO	*11192	2005	Graphical symbols	Current	
BS EN ISO	*11547 + A1	2000	Start-in-gear protection	Current	
BS EN ISO	*11591	2011	Field of vision	Under Revision – DIS	
BS EN ISO	*11592-1	2001	Determination of maximum power	Under revision – FDIS	
BS EN ISO	*11812	2002	Cockpits	Current	
BS EN ISO	*12215-1	2000	Scantlings – GRP reference laminate	Current	
BS EN ISO	*12215-2	2002	Scantlings – Core materials for composites	Current	
BS EN ISO	*12215-3	2002	Scantlings – Steel, aluminium wood, etc.	Current	
BS EN ISO	*12215-4	2002	Scantlings – Workshop conditions	Current	
BS EN ISO	*12215-5 + A1	2014	Scantlings – Design pressures	Current	28/02/2015
BS EN ISO	*12215-6	2008	Scantlings – Structural arrangements	Current	
ISO	12215-7	2008	Scantlings – Multihulls	New Standard – Delayed	
BS EN ISO	*12215-8	2010	Scantlings – Rudders	Current	
BS EN ISO	*12215-9	2012	Scantlings – Sailing craft appendages	Current	

BS EN ISO	12215-10		Scantlings – Rig loads and attachments	New Standard - Delayed	
BS EN ISO	*12216	2002	Windows and hatches	Under Revision	
BS EN ISO	*12217-1	2013	Stability – Non-sailing boats > 6m	Current	06/07/2015
BS EN ISO	*12217-2	2013	Stability – Sailing boats >6m in length	Current	06/07/2015
BS EN ISO	*12217-3	2013	Stability – Boats of < 6m in length	Current	06/07/2015
BS EN ISO	*13297	2014	AC electric system	Current	30/06/2015
ISO	13342	1995	Outboard motor static thrust measurement	Current	
BS EN ISO	*13590 + AC	2004	Personal watercraft (PWC)	Current	
BS ISO	13591	1997	Portable fuel systems for outboard motors	Current	
BS ISO	13592	1998	Petrol engine backfire prevention	Current	
BS EN ISO	*13929	2001	Steering gear – Rack and pinion	Current	
BS EN ISO	*14509-1	2008	Measurement of sound emitted by powered recreational craft pass by test	Current	
BS EN ISO	*14509-2	2006	Sound assessment using reference craft	Current	
BS EN ISO	*14509-3	2009	Sound assessment using calculation and measurement procedures	Current	
BS EN ISO	*14895	2003	Liquid-fuelled galley stoves	Under Revision – DIS	
BS EN ISO	*14945 + AC	2005	Builder's plate	Current	

BS EN ISO	*14946 + AC	2005	Maximum load capacity	Current	
BS EN ISO	*15083	2003	Bilge pumping systems	Current	
BS EN ISO	*15084	2003	Strong points, anchoring etc.	Current	
BS EN ISO	*15085 + A1	2009	Guard rails, lifelines and handrails	Under Revision – DIS	
BS EN ISO	*15584	2001	Inboard mounted petrol engine fuel and electrical components	Current	
BS EN	*15609	2012	LPG Propulsion systems	Current	
BS EN ISO	*15652	2005	Steering systems – mini-jet boats	Current	
BS EN ISO	*16147 + A1	2013	Inboard mounted diesel engine fuel and electrical components	Current	31/08/2013
BS EN ISO	*16180	2013	Electric Navigation lights – Installation and Placement	Current	
ISO	16315		Electrical Propulsion Systems	New standard – DIS	
ISO	18854		Engine exhaust emission measurement	New standard	
ISO	19009		Electrical Navigation Lights – Performance Requirements	New standard	
BS EN ISO	*21487	2014	Permanently installed petrol and diesel fuel tanks	New Standard	30/06/2015
BS EN ISO	*25197 + A1	2014	Electrical/Electronic control systems for steering, shift and throttle	New Standard	30/06/2015
BS EN	*28846 + A1	2000	Electrical Devices – Protection against ignition of surrounding flammable gases (ISO 8846:1990/A1 : 2000)	Current	
BS EN	*28848 + A1	2000	Remote Steering Systems (ISO 8848:1990/A1 : 2000)	Current: Under	

				Review	
BS EN	*29775 + A1	2000	Remote steering systems for single outboard motors of 15-40kw (ISO 9975:1990)	Current: Under Review	
BS EN	*60092-507	2000	For 3-phase electrics only	Current	

Note 1: \*Date of cessation of presumption of conformity of superseded standard