Executive summary

ISO Technical Committee (TC) 188, *Small craft*, develops international standards for the global marine industry.

The Scope of ISO/TC 188 is:

*Standardization of equipment and construction details of recreational craft, and other small craft using similar equipment, up to 24 meters length of the hull.*

Excluded are lifeboats and lifesaving equipment covered by ISO/TC 8, *Ships and marine technology*.

The marine industry is characterized by a limited number of large production small craft manufacturers and many small manufacturers, including marine engine and component builders. For years, most small manufacturers have been building to local or country laws and are not specifically familiar with international standards.

International standards are vital to ensure the state of the art, minimize world trade barriers and provide guidance for consistency in design, construction, performance, and safety of small craft marine products around the world.

ISO/TC 188 has broad representation from all regions of the globe involved in the small craft marine industry.

To focus and guide its work, ISO/TC 188:

a) Identifies, in collaboration with its stakeholders, government agencies and other relevant ISO Technical Committees, areas requiring the development of International Standards;

b) Keeps under constant review technological advances, changes to national and international regulations and other current International Standards in order to determine whether changes are needed to the standards under the TC’s responsibility;

c) Drafts work in both the ISO and CEN areas in response to the European Union’s Recreational Craft Directive.
1 Introduction

1.1 ISO technical committees and business planning

The aim of the ISO Technical Committees (ISO/TCs) Strategic Business Plan (SBP) is to align the ISO work programme with expressed business environmental needs and trends. Additionally, the SBP allows ISO/TCs to prioritise its goals among different projects, to identify the benefits expected from the availability of International Standards, and to ensure adequate resources for projects throughout their development.

1.2 International standardization and the role of ISO

The foremost aim of international standardization is to facilitate the exchange of goods and services through the elimination of technical barriers to trade.

Three bodies are responsible for the planning, development and adoption of International Standards:

- **ISO** (International Organization for Standardization) is responsible for all sectors excluding Electrotechnical and Telecommunications Technologies,
- **IEC** (International Electrotechnical Committee) is responsible for Electrotechnical sectors, and
- **ITU** (International Telecommunication Union) is responsible for Telecommunications Technologies.

ISO is a legal association, the members of which are the National Standards Bodies (NSBs) of some 164 countries (organizations representing social and economic interests at the international level), supported by a Central Secretariat based in Geneva, Switzerland.

The principal deliverable of ISO is the **International Standard**.

An International Standard embodies the essential principles of global openness and transparency, consensus and technical coherence. These are safeguarded through its development in an ISO Technical Committee (ISO/TC), representative of all interested parties, supported by a public comment phase (the ISO Technical Enquiry). ISO and its **Technical Committees** are also able to offer the ISO Technical Specification (ISO/TS), the ISO Public Available Specification (ISO/PAS) and the ISO Technical Report (ISO/TR) as solutions to market needs. These ISO products represent lower levels of consensus and have therefore not the same status as an International Standard.

ISO offers also the International Workshop Agreement (IWA) as a deliverable which aims to bridge the gap between the activities of consortia and the formal process of standardization represented by ISO and its national members. An important distinction is that the IWA is developed by ISO workshops and fora, comprising only participants with direct interest, and so it is not accorded the status of an International Standard.
2 Business Environment of the ISO/TC

2.1 Description of the Business Environment

The following political, economic, technical, regulatory, legal and social dynamics describe the business environment of the industry sector, products, materials, disciplines or practices related to the scope of this ISO/TC, and they may significantly influence how the relevant standards development processes are conducted and the content of the resulting standards:

The purpose of the work within ISO/TC 188 is to provide tools to remove barriers to trade in the field and to increase participation in the globalization of standards for recreational craft and their components.

Since the coming into force of the Recreational craft Directive (RCD) (94/25/EC) on 16 June 1998 and now the RCD (2013/53/EU) on 18 January 2017, most of the work within ISO/TC 188 has been devoted to developing standards to support this Directive.

These standards will also help to remove unequal conditions of competition within the recreational craft market. The Directive further influences the work of ISO/TC 188 since in this Directive, the European Commission has taken as its baseline a high level of protection on matters concerning health, safety, the environment and consumer protection. This is reflected in the essential requirements with which recreational craft, personal watercraft, marine engines, partly completed craft and their components must comply.

The standards developed within ISO/TC 188 to support the Directive are intended to meet the criteria set out in the essential requirements. They are also transposed into harmonized European Norms (standards) that can be used in order to facilitate the presumption of conformity with the essential requirements of the Directive.

The continuing emergence of new and untested technologies, especially in the areas of electronics, fuel and craft/system design, will steer the ISO/TC 188 to explore new areas of standardization.

2.2 Quantitative Indicators of the Business Environment

The following list of quantitative indicators describes the business environment in order to provide adequate information to support actions of the ISO/TC:

- Total international trade in the industry sector/products/materials (in the EU).
- Imports and exports in the industry sector/products/materials (in €) by major geographical regions and/or by countries.
- Total international trade in new industry sector/products/material growth areas (in US$).
- Number of companies world-wide operating in the industry sector or producing the products/materials relevant to the industry sector.
- Estimated employment world-wide in the industry sector.
- Estimated percentage of products in the marketplace self-declared or certified to the ISO International Standards.
• Increased income and/or cost savings achieved through implementation of the ISO International Standards.

• Number of organisations world-wide requiring compliance with the ISO International Standards by suppliers, contractors and other service providers.

• Estimated number of cases of governmental adoption of the ISO International Standards into legislation, regulations or procurement requirements.
3 Benefits expected from the work of the ISO/TC

The small craft industry is a global industry, with products that are designed, manufactured, assembled, operated and maintained throughout the world. The industry, its supply chain and dealer networks have the same reach. International standards are vital to ensure the consistent quality, interoperability, connectivity, and safety of these products.

The small craft industry uses standards developed by many different enterprises and organizations. Having to comply with duplicative, overlapping, or inconsistent requirements in standards places a costly burden on the industry. ISO/TC188 is a prime entity for developing international standards that significantly reduces cost to industry, saves the very valuable and limited resources of industry experts from participating in redundant standardization activities at different levels, and eventually increases the overall quality of small craft industry standards.

Over 70 standards have been developed or are under development in ISO/TC 188. Of these, about 60 standards have been or are expected to become mandated to support the Recreational Craft Directive. Once they have also become harmonized standards (European Norms), they greatly simplify presumption of conformity to the Directive for most boat builders and component manufacturers.

The work of ISO/TC 188 has also already been applied in markets outside the European Union, such as in Canada and Australia. National standards or rules are being replaced by the ISO standards worldwide.

It is noteworthy that some of the standards work in ISO/TC 188 has been “green field” work. The work groups of ISO/TC 188 have created standards in areas where no international standards had previously existed. Examples of this can be found in the development of standards for small craft firefighting and for small craft scantlings.

The following are some of the many benefits that result from the work of ISO/TC188:

- Eliminating International and European trade barriers by helping ensure that contradictions and/or repetitions are eliminated from the International Standards under ISO/TC188 responsibility.

- Promoting safety requirements through consensual requirements to minimize, and wherever possible eliminate, risks to persons and goods.

- Protecting the environment from unacceptable damage.

- Harmonizing test methods and quality criteria.

- Providing national authorities (i.e., Recreational craft Sectoral Group) with globally relevant standards as a basis for small craft certification.

- Increasing voluntary consensus in marine industry standards in lieu of increased national regulations.

- Providing technical standards to implement the broad aspects of EU regulations where details have been left to national authorities for implementation.

- Translating regulatory requirements into specific industry standards for implementation.

- Providing industry standards to serve as a foundation for international regulations.
• Providing manufacturers with a common base for design, construction and repair of small craft regardless of which shipyard and in which nation the work is performed.

• Insuring the interchangeability of key components and systems.

Liaisons have been created between ISO/TC 188 and other ISO/TCs to tap industry expertise in fields related to design, construction and testing of small craft.

4 Representation and participation in the ISO/TC

4.1 Membership

Countries/ISO member bodies that are P and O members of the ISO committee

4.2 Analysis of participation

ISO/TC 188 has Participating Members from countries with significant recreational boating industries and has Observing Members from countries with limited recreational boating activities. Europe, North America, and Asia are well represented at the ISO/TC 188 level. Though several Work Groups lack participation from various regions, ISO/TC 188 works to encourage participation from these missing regions.

ISO/TC 188 members have had excellent participation in the standards’ ballot process and actively participate in the annual plenary meeting which has been held in both the EU and North America.

ISO/TC 188 has liaisons with many related ISO committees and coordinates in areas of mutual interest. Liaison groups include CEN/TC 464, ISO/TC 70, ISO/TC 8, IEC and ICOMIA. The full list of liaisons to ISO/TC 188 is available on the ISO/TC 188 website.

The increased visibility of ISO/TC 188 and expanded awareness of ISO/TC 188 activities will help the recruitment of new ISO/TC 188 members and experts. Efforts to increase awareness of ISO/TC 188 can be made in various ways:

• Advertising the new ISO/TC 188 website
• Publishing articles regarding ISO/TC 188 activities
• Distributing relevant materials to potential member national marine agencies
• Adding a plenary meeting agenda item to discuss and implement initiatives of publicity
• Participating in international marine conferences and seminars
• Using social media to spread ISO/TC 188 information
5  Objectives of the ISO/TC and strategies for their achievement

5.1  Defined objectives of the ISO/TC

The primary objective of ISO/TC 188 is to develop standards for the design, construction, test and evaluation, operation and maintenance of components, equipment, systems and structural details of recreational craft, and other small craft using similar equipment, up to 24 m length of hull. The standards include issues related to safety, reliability and the environment. Lifeboats and lifesaving equipment covered by ISO/TC 8 are excluded.

These objectives drive the development of standards to support the Recreational Craft Directive 2013-53-EU (RCD). There are over 60 standards supporting the Directive. There is also an ongoing need for systematic reviews and possible revisions of these standards generally taking place every 5 years. Approval of all ISO standards within ISO/TC 188 is relegated to the Participating (P) members of the TC.

In the ISO standard approval process, there is also a parallel process for developing standards for the European Committee on Standardization (CEN). CEN/TC 464, Recreational Craft, has the responsibility to support the RCD for the European Union.

5.2  Identified strategies to achieve the ISO/TC’s defined objectives

The objectives of ISO/TC 188 are achieved by involvement of the marine industry, and to a certain extent, national authorities and regulating agencies, in all the major boat building countries of the world.

Within ISO/TC 188, priority is given to standards needed to support the Recreational Craft Directive. These priorities also consider:
- Elimination of trade barriers
- Protection of life and property
- Performance requirements
- Interfaces between design, production and test methods

ISO/TCS 188 receives strong involvement of the industry’s international association, ICOMIA, the International Council of Marine Industry Associations. ICOMIA’s Technical Committee has greatly supported the development of standards in ISO/TC 188. Additionally, some of the existing ICOMIA standards have been useful in the work of ISO/TC 188.

Financing of the secretariat for ISO/TC 188, SIS, is supported, in part, by ICOMIA.

The structure of ISO/TC 188 has evolved over the years with the increasing workload of the TC. The present “flat” structure reflects both the need to develop the standards for the current Recreational Craft Directive and the fact that numerous experts are active in many of the working groups. Committee work is broken down into Work Groups segregated into major subject areas. In the organizational structure of ISO/TC 188, Subcommittee 1 is responsible for all projects related to personal safety equipment.
6  Factors affecting completion and implementation of the ISO/TC work programme

- The standards created in ISO/TC 188 are for use internationally, but are intended to support the Recreational Craft Directive (2013-53-EU). Additionally, the same standards are created for use by CEN stakeholders. These competing interests are not always in alignment and may cause delays in each group’s acceptance process.

- In some cases, no basis from earlier work, either from within or external to the industry sector exists, so the TC’s working groups (WGs) must create an entirely new, original document. For example, stability standards for small craft had not existed in any previous small craft standards. This is “green field work”. More recently, work in electric propulsion and electric/electronic controls have resulted in the initial document in those fields.

- The standards development process may employ experts who may have not been previously engaged in standards work, adding to development challenges.

- The number of experts available for WG convenorship/project leader is limited, due to any number of reasons, including amount of topical knowledge, non-availability from primary job, lack of experience in running a technical group or, lack of knowledge of or the inability to lead an international technical team. This results in a small number of convenors/project leaders responsible for multiple working groups.

- Many countries are involved in standard development work and bring their national regulations and/or “bias” to the international table in the hope of imparting views that their national requirements will be incorporated into the standard. Their hope is that their national requirements will be harmonized with the “international” standard. WG experts forcing national requirements in these documents can make for an extended standard development process. WGs must balance the diverse views of national constituencies with the needs of the industry and application to the RCD.

- Increased demands placed on the WG experts in the form of time and money are sometimes seen negatively by the expert’s employer. Due to these demands, some experts leave, or are asked to leave by their employer, delaying the standards development work. Many experts are voluntary and participate on a self-paid basis, making financial resources a limiting factor.

- Maintenance of existing standard require a considerable amount of work. All the factors affecting the development of new standards also apply to the maintenance of existing standards.

- The costs of hosting and attending standards development meetings are increasing annually, driving less participation from WG experts. Electronic meetings, though not as inclusive as face-to-face meetings, are becoming the norm.
7 Structure, current projects and publications of the ISO/TC

This section gives an overview of the ISO/TC 188’s structure, and information on its existing and planned standardization projects and publications.

Information on ISO online

The link below is to the TC’s page on ISO’s website:

ISO/TC 188 on ISO Online

Click on the tabs and links on this page to find the following information:
- About (Secretariat, Committee Manager, Chair, Date of creation, Scope, etc.)
- Contact details
- Structure (Subcommittees and working groups)
- Liaisons
- Meetings
- Tools
- Work program (published standards and standards under development)

Additional to the ISO website, ISO/TC 188 has created their own website:

https://committee.iso.org/home/tc188