EXECUTIVE SUMMARY

Business Environment
- The proportion of goods transported within the EU by inland navigation vessels is approximately 6.9% (2015).¹
- European river cruising continues to be a fast-growing segment of European business.
- Parties involved in inland navigation are in particular:
  o Ship owner and Crew;
  o Authorities, port authorities;
  o Accident insurance for ship crews;
  o Classification societies;
  o Component suppliers;
  o Constructors;
  o Yards.

Benefits
To write the necessary standards for a safe inland navigation in Europe.
- Removal of trade barriers.
- Raising the security level for crew and passengers.
- Minimizing the environmental impact.
- Cost reduction for assembly and equipment.

Priorities
- Preparation of missing standards (e.g. habitations on board of vessels, safety rota);
- Revision and updating of existing standards in accordance with the market needs;
- Monitoring the system of European directives and requirements of other mandatory bodies (e.g. CCNR (Central Commission for the Navigation of the Rhine), UN-ECE (United Nations Economic Commission for Europe) and the related standards.

¹ Taken from "INE" — Inland Navigation Europe — “Facts and figures”, http://www.inlandnavigation.org
1 BUSINESS ENVIRONMENT OF THE CEN/TC

1.1 Description of the Business Environment

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

Scope of CEN/TC 15:
Standardization in the field of shipbuilding and equipment for inland navigation vessels, ship to shore interfaces and inland waterway navigation.

CEN/TC 15 has been reactivated in 1990, as it became evident that the international standardization work did not fulfill the European needs sufficiently and had to be supplemented to take care of the particular regional needs within Europe.

CEN/TC 15 creates and maintains European Standards in all fields of inland navigation and its business environment, such as harbours. The objective of this is to raise the security level for crew and passengers, and to remove trade barriers and to keep the environmental impact of inland navigation to the technical possible minimum.

CEN/TC 15 is reviewing the activities of CCNR, Central Commission for the Navigation of the Rhine, as well as the activities of the European Commission, especially regarding the development of the Directive 2016/1629/EU on technical requirements for inland waterway vessels.

CEN/TC 15 is reviewing the existing and prospective ISO standards in the field of inland shipbuilding and introduces them as European standards as far as necessary and feasible.

The existing varying rules and registration conditions should form uniform conditions for all European members.

The European Commission refers to CEN/TC 15 standards in two directives:
- Directive 2016/1629/EU on technical requirements for inland waterway vessels.
1.2 Quantitative Indicators of the Business Environment

Freight ships:

Transported goods

Steady growth in inland navigation includes annual 2-digit growth in container and general cargo freight. High quality service and dynamism is behind significant increases in short-distance freight movements for fast-moving consumer goods. Niche markets have also been developed for waste and recycling as well as for vehicles and abnormal loads.

While the Western European waterways carry the majority of cargo and traffic continues to grow, Eastern European waterways have substantial growth potential once infrastructure bottlenecks are cleared, and this will pave the way for significant growth in trade between East and West.

The share of overall freight traffic at 6.9 % in entire Europe is rather small, however inland navigation is reaching up to 44 % of the total transport share in the catchment areas of the major seaports.

The inland navigation fleet of the EU has more than 12 000 vessels, which carry approx. 550 million tons a year. Inland navigation offers per transport unit significant larger transport capacities than other modes of transport: one push tow with a charge of 3 700 t corresponds to 93 waggons of 40 t or 148 trucks of 25 t. These trucks would build up a motorcade of 10 km length. More goods on waterways would help against bumper-to-bumper traffic jam, noise, dirt and accidents.


Passenger ships:

There is a good potential for growth in demand in the years to come. River cruise shipping boomes. Many older vessels do not comply with the state of the art and do not fulfil the demands of today’s passengers. For new buildings specifications and standards are needed to fulfil modern requirements e.g. for emission limits.
2 BENEFITS EXPECTED FROM THE WORK OF THE CEN/TC 15

- Rising of safety level for crew and passenger;
- Enhancement of traffic safety and safety of operation within harbours;
- Reduction of greenhouse gas emissions and improvement of environmental acceptability of inland navigation;
- Rise of ergonomics;
- Removal of technical trade barriers and creation of open markets throughout Europe;
- Harmonization of national standards;
- Two way information of activities of CCNR, EU-Commission and CESNI.

3 PARTICIPATION IN THE CEN/TC 15

All the CEN national members are entitled to nominate delegates to CEN Technical Committees and experts to Working Groups, ensuring a balance of all interested parties. Participation as observers of recognized European or international organizations is also possible under certain conditions. To participate in the activities of CEN/TC 15, please contact the national standards organization in your country.

4 OBJECTIVES OF THE CEN/TC AND STRATEGIES FOR THEIR ACHIEVEMENT

4.1 Defined objectives of the CEN/TC 15

Inland navigation is on the move, in the sense of development of technology (e. g. new propulsion technology) as well as in the sense of new logistical systems (new freight systems). Standards should keep up with these developments and therefore should be kept up to date by a continuous process.

Based on the considerations above, CEN/TC 15 has the following objectives for its future work:

- to harmonize the transport conditions by harmonizing the existing varying rules with the help of European Standards;
- to improve the safety for the crew, passenger, cargo and the vessels itself;
- to keep the impact to the environment caused by inland navigation to the technical possible minimum;
- to introduce ISO standards in the field of inland navigation vessels as European Standards as far as necessary and feasible;
- to create European Standards in the safety sector which serve as interfaces for, among others, harbours, berth stations, loading places, agronomical navigation/operation;
- to create and maintain European Standards supporting EC directive for inland waterway vessels;
- to focus on the ship-to-shore interface
- reckoning inland navigation vessels as a most important part of modal transport.
4.2 Identified strategies to achieve the CEN/TC's defined objectives

A Liaisons for cooperation in the standards work exists to ISO/TC 8 Ships and marine technology — SC 7 Inland navigation vessels;

The European Directive on technical requirements for inland navigation vessels is reviewed regularly regarding requirements, for which standards could be of assistance.

4.3 Environmental aspects

Inland shipping has some systematic advantages. It has the lowest specified energy consumption and the lowest external costs of all modes of transport, a high transport capacity and — compared to tracks or streets — low investment need while the infrastructure is preserved and improved.

Average self-propelled vessels consume up to 0.013 l/t km (litre per tonne and km), whereas modern vessels can achieve gas oil consumption as low as 0.0044 l/t km. Rail is estimated to consume on average 0.010 l/tkm and road transport 0.029 l/tkm. Inland ships today emit 3 to 5 times less carbon than road trucks per tonne-km. Thus the inland vessel causes the lowest pollutant, noise, accident, and climate expenses.

With the lowest CO₂ emissions and less than a 1 % share of all negative environmental impacts produced by transport, inland waterways help businesses to reduce harmful emissions, lower energy consumption and cut noise nuisance. Using the existing waterway infrastructure also reduces the demand for new infrastructure, preserving resources and protect man and environment.

![Figure 2 — Energy efficiency: 5 l of fuel equivalent enables the transport of 1 tonne of goods over x km](http://www.inlandnavigation.org)

Source: Taken from “INE” — Inland Navigation Europe — http://www.inlandnavigation.org

Provisions of CEN/TC 15 with regard to the environment:

1. Key environmental issues.
   Environmental aspects regarding materials, emissions to air, discharge to water, waste, noise and vibration have to be taken into consideration.

2. For any new work item proposal an environmental checklist will be worked out.
3. The environmental issues of any standard will be assessed and if useful an annex on environmental aspects will be attached to the standard giving a table that shows a mapping of the life-cycle of the product in terms of the environment.

5  FACTORS AFFECTING COMPLETION AND IMPLEMENTATION OF THE CEN/TC WORK PROGRAMME

Legal factors:

- EU-Commission DG MOVE (Mobility and transport);
  - Directive 2016/1629/EU on technical requirements for inland waterway vessels;
- CCNR, Central Commission for the Navigation of the Rhine,
  - The Rhine Shipping Regulation (RheinSchUO:1995);
- UN-ECE, United Nations — European Commission for Economics;
- IMO, International Maritime Organization;