# Inland navigation vessels — Harbours for inland navigation

The European Standard EN 14503:2003 has the status of a British Standard

 $ICS\ 47.060;\ 93.140$ 



# National foreword

This British Standard is the official English language version of EN 14503:2003.

The UK participation in its preparation was entrusted by Technical Committee SME/32, Ships and marine technology, to Subcommittee SME/32/7, Ships and marine technology — Inland navigation vessels, which has the responsibility to:

- aid enquirers to understand the text;
- present to the responsible international/European committee any enquiries on the interpretation, or proposals for change, and keep the UK interests informed;
- monitor related international and European developments and promulgate them in the UK.

A list of organizations represented on this subcommittee can be obtained on request to its secretary.

# **Cross-references**

The British Standards which implement international or European publications referred to in this document may be found in the *BSI Catalogue* under the section entitled "International Standards Correspondence Index", or by using the "Search" facility of the *BSI Electronic Catalogue* or of British Standards Online.

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This British Standard was published under the authority of the Standards Policy and Strategy Committee on 14 January 2004

# Summary of pages

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# English version

# Inland navigation vessels - Harbours for inland navigation

Bateaux de navigation intérieure - Ports pour la navigation intérieure

Fahrzeuge der Binnenschifffahrt - Häfen für die Binnenschifffahrt

This European Standard was approved by CEN on 14 November 2003.

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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, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

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# **Foreword**

This document EN 14503:2003 has been prepared by Technical Committee CEN/TC 15 "Inland navigation vessels", the secretariat of which is held by DIN.

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 June 2004, and conflicting national standards shall be withdrawn at the latest by June 2004.

The standard contains definitions and general requirements for the individual elements of a harbour.

However, it does not specify which elements a harbour has to consist of. Also, the standard is restricted to ship-specific elements of a harbour and does not cover transhipment, e.g. to rail or lorry.

It does not contain either any information about ecological compatible construction planning.

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

# 1 Scope

This standard applies to harbours for inland navigation.

It does not apply to

- harbours for recreational craft;
- ferry terminals or
- landing stages for passenger ships.

## 2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

EN 1305, Inland navigation vessels – Connections for the discharge of oily mixture.

EN 1306, Inland navigation vessels – Connections for the discharge of waste water.

EN 12827, Inland navigation vessels – Connections for the transfer of diesel oil.

EN 13573, Inland navigation vessels – Anchoring, coupling, towing, hauling and mooring systems.

prEN 14329:2001, Inland navigation vessels – Installation of berths and loading areas.

EN 14144, Lifebuoys - Requirements, tests.

EN 14145, Holders for lifebuoys.

# 3 Terms and definitions

For the purposes of this European Standard, the terms and definitions given in prEN 14329:2001 and the following apply.

# 3.1

### narbour

expanses of water and land in a specified area with installations for berthing, loading and unloading of inland navigation vessels

# 3.2

## river and canal harbour

harbour on navigable waters

### 3.3

## harbour entrance/mouth

junction between harbour basin and navigable waters

## 3.4

## harbour basin

area of water separate from the navigable water, including shore structures and systems for mooring vessels

### 3.5

# loading area

berth for loading and unloading inland navigation vessels

[prEN 14329:2001, 3.2]

### 3.6

# coupling point

berth suitable for joining together and detaching units

### 3.7

## holding area

area used just for short-term waiting until the vessel continues its journey or is assigned a berth or loading area

[prEN 14329:2001, 3.3]

# 3.8

## turning area

area of water for inland navigation vessels to turn round in

### 3.9

# mooring system

fixed system for making fast inland navigation vessels

[prEN 14329:2001, 3.5]

### 3.10

# inland navigation vessel facilities

systems for supplying inland navigation vessels with drinking water, electrical current, fuel and for disposing of ship's waste

### 3.11

# safety devices and equipment

<marine>

systems used to protect persons, vessels, installations and the environment

# 3.12

## quay ladder

ladder on vertical walls or quays

# 4 Harbour requirements

## 4.1 General

# 4.1.1 Shape/width

Harbours and their entrances shall be designed so that excess silting is avoided and the types of vessels and units usually plying the adjacent waters can enter and leave the harbour.

# 4.1.2 Depth of navigation channel

The depth of the navigation channel shall be at least equivalent to the minimum navigation channel depth of the adjacent waters.

NOTE The minimum navigation channel depths are fixed in agreement with the regulations covering the corresponding bodies of water.

## 4.2 Waterfront structures

The design shall be selected to prevent damage to laid up inland navigation vessels by parts of the embankment even when there are changes in water levels.

# 4.3 Berths and loading areas

Berths and loading areas shall meet the requirements of prEN 14329.

Berth areas shall have paths and roads connecting to the public transport network on the shore side and to the mooring systems, steps and quay ladders on the water side.

# 4.4 Coupling points

Coupling points shall be provided in the harbour if the adjacent waterways are approved for unit traffic. The length and breadth of the coupling points depend on the formations and dimensions of the vessels and units.

# 4.5 Holding areas

Holding areas shall be marked as such.

# 4.6 Turning areas

Turning areas shall be provided a distance away from the berths. The diameter of the turning area shall be the length of the ship or the unit plus a manoeuvring distance of at least 30 m.

## 4.7 Mooring systems

## 4.7.1 Mooring systems in berths and loading areas

The mooring systems shall meet the requirements of EN 13573.

# 4.7.2 Mooring systems in holding areas

Either bollards or recess bollards shall be provided as mooring systems in holding areas.

# 4.8 Inland navigation vessel facilities

# 4.8.1 General

The following supply and disposal facilities shall be provided in the berth areas of the harbour, except for the areas for crewless vessels.

# 4.8.2 Drinking water supply facility

A drinking water supply facility shall be provided so that filling up with drinking water is possible by means of a hose. It shall be frost-resistant and be located close to the berth. Drinking water supply facilities shall be clearly marked as such.

# 4.8.3 Shore electrical connection facility

A shore connection and to other external networks shall be protected against high water and be located close to the berth. The shore electrical connection shall be designed for supplying vessels with 230/400 V and meet the requirements of the CENELEC regulations

The particular requirements for shore electrical connections for vessels carrying dangerous goods shall be noted.

# 4.8.4 Waste disposal

In harbours, it shall be possible to dispose of waste in accordance with national regulations in each case.

# 4.8.5 Disposal of faecal matter

In harbours, it shall be possible to discharge faecal matter collected on vessels via the ship-side connections as specified in EN 1306.

# 4.8.6 Disposal of oily waste

Harbours shall have suitable facilities for the discharge of oily waste in solid or liquid form.

If there is a pump provided for the discharge of liquids from the bilge, a shore-side connection shall be available to the ship-side connections as specified in EN 1305.

# 4.8.7 Vehicle loading point

In harbours, it shall be possible to load and unload vehicles in the berth area. This area shall be marked as such.

### 4.8.8 Transfer of diesel oil

If it is possible to supply diesel oil, there shall be a ship-side connection as specified in EN 12827.

# 4.9 Safety systems and equipment

The safety systems shall meet the requirements of each responsible national authority. Devices shall be provided and measures taken at least for:

- a) fire protection;
- b) first aid;

# EN 14503:2003 (E)

- c) rescue equipment;
- d) escape ways;
- e) oil binders;
- f) oil booms;
- g) oil suction devices;
- h) operating instructions;
- i) access of service vehicles;
- j) fencing;
- k) lighting;
- I) dangerous goods.

NOTE Special hazards should be noted in the transhipment of dangerous goods

# 4.10 Emergency telephone

Emergency telephones shall be provided in the berth areas.

The particular facilities shall be made known to the ships' operators.

# 4.11 Rescue equipment

Suitable rescue equipment shall be provided in the berth areas not more than 100 m apart, e.g. lifebuoys as specified in EN 14144 with at least a 30 m long buoyant line in the holder as specified in EN 14145 or rescue balls and/or rescue poles.

In addition, the berths shall have a notice board with instructions on how to rescue and revive drowning persons.

# 4.12 Notice boards

The harbour area shall have suitable notice boards with the emergency telephone numbers of doctors, police and the fire brigade.

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