



Economic Commission for Europe**Inland Transport Committee****Working Party on Inland Water Transport****Working Party on the Standardization of Technical
and Safety Requirements in Inland Navigation****Fifty-eighth session**

Geneva, 17–19 February 2021

Item 5 (b) of the provisional agenda

**Standardization of technical and safety requirements in inland navigation:
Recommendations on Harmonized Europe-Wide Technical Requirements
for Inland Navigation Vessels (resolution No. 61, revision 2)****Amendment proposals to the annex to resolution No. 61,
revision 2, based on the European Standard laying down
technical requirements for inland navigation vessels,
edition 2021****Note by the secretariat****Mandate**

1. This document is submitted in line with the Proposed Programme Budget for 2021, part V, Regional cooperation for development, section 20, Economic Development in Europe. Programme 17, Economic Development in Europe (A/75/6 (Sect.20), para. 20.51).
2. It is recalled that the Working Party on Inland Water Transport (SC.3) at its sixtieth session had decided to align the annex to resolution No. 61 with the European Standard laying down Technical Requirements for Inland Navigation vessels (ES-TRIN) adopted by the European Committee for drawing up common standards in the field of inland navigation (CESNI). (ECE/TRANS/SC.3/203, para. 67). On 13 October 2020, CESNI adopted ES-TRIN edition 2021, which replaced edition 2019 (available at <https://www.cesni.eu/en/documents/es-trin-2021/>).
3. The annex to this document contains the newly introduced provisions of ES-TRIN that may be relevant for the annex to resolution No. 61 and can be used for further work.

Annex

Newly introduced provisions of the European Standard laying down Technical Requirements for Inland Navigation vessels edition 2021 that may be relevant to the annex to resolution No. 61, revision 2

I. Chapter 4 “Safety clearance, freeboard and draught marks”

Article 4.03 Draught marks

1. Zone R is equivalent to Zone 3.
2. The plane of maximum draught for each permitted zone shall be determined in such a way that the specifications concerning freeboard, safety clearance and the vessel’s maximum design draught are all met.
3. The plane of maximum draught shall be indicated by means of highly visible, indelible draught marks.
4. Draught marks are to be designed as follows:
 - a) The topmost draught mark points towards the stern and is a rectangle 300 mm long and 30 mm high, the baseline of which is horizontal and coincides with the plane of the deepest authorised draught. If the topmost draught mark is the one applicable to zone 3, it is 40 mm high.
 - b) The additional draught marks to be added point towards the bow and the following provisions apply:
 - aa) Draught marks for zone 3 comprise a rectangle 300 mm long and 40 mm high
 - bb) Draught marks for zones 1 and 2 comprise a rectangle 150 mm long and 30 mm high, the baseline of which is horizontal and coincides with the plane of the maximal permissible draught.
 - c) If the draught mark to be added for zone 3 or 4 coincides with the uppermost draught mark, the latter can be dispensed with.
5. The number of the zone, in characters 60 mm high × 40 mm deep, is to be added next to the draught marks towards the bow; in the case of zone 4, the number can be dispensed with.
6. The draught marks according to (4) and (5) and their orientation are to be in accordance with Figure 2.

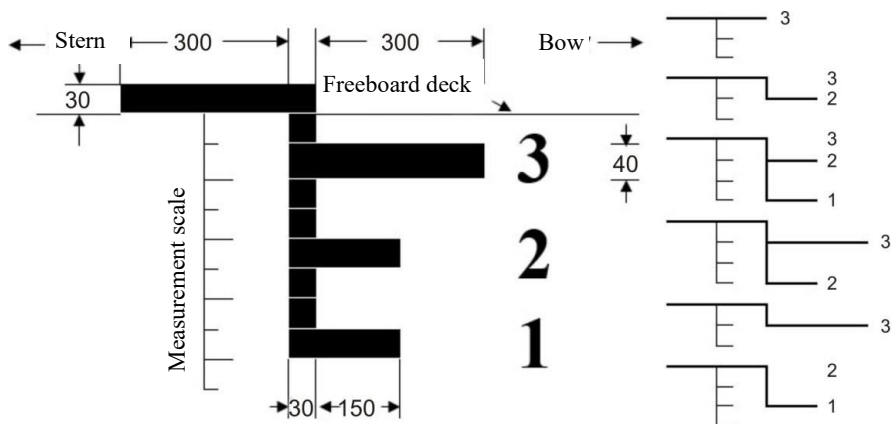


Figure 2

7. Vessels shall have at least three pairs of draught marks, of which one shall be at $1/2$ of the length L and the two others located, respectively, at a distance from the bow and stern that is equal to $1/6$ of the length L .

8. Marks or indications which cease to be valid following a further inspection shall be deleted or marked as being no longer valid under the supervision of the inspection body. Illegible draught marks may only be replaced under the supervision of an inspection body.

9. Where a vessel has been measured in implementation of the 1966 Convention on the Measurement of inland navigation vessels and the measurement mark is at the same height as the uppermost of the draught marks prescribed in (4), this measurement mark shall also be deemed to be the draught mark for this zone; this shall be mentioned in the inland navigation vessel certificate.

10. By way of derogation from (7)

a) where a vessel is less than 40 m in length L it will suffice to affix two pairs of draught marks at a distance from the bow and stern, respectively, that is equal to approximately a quarter of the length L ;

b) where vessels are not intended for the carriage of goods, a pair of draught marks located roughly halfway along the vessel will suffice.

11. If the plane of maximum draught of a vessel for one or more zones has been determined by assuming that the holds may be closed in such a way as to make them spray-proof and weathertight, and if the distance between the plane of maximum draught and the upper edge of the coamings is less than the permissible safety clearance for the zone in question, the maximum draught for sailing with uncovered holds shall be determined.

The following statement shall be entered on the inland navigation vessel certificate:

“Where the hold hatches are totally or partly uncovered the vessel may only be loaded up to ... mm below the draught marks for Zone”

12. In the case of vessels with open holds, in addition to the provisions of (7) the draught marks for the relevant zones are to be supplemented by a rectangle 75 mm long by 30 mm high, pointing aft, the base of which is horizontal and coinciding with the level of the maximum permissible draught for navigation in the zone in question with open holds.

13. The draught marks according to (12) and their orientation are to be in accordance with Figure 3.

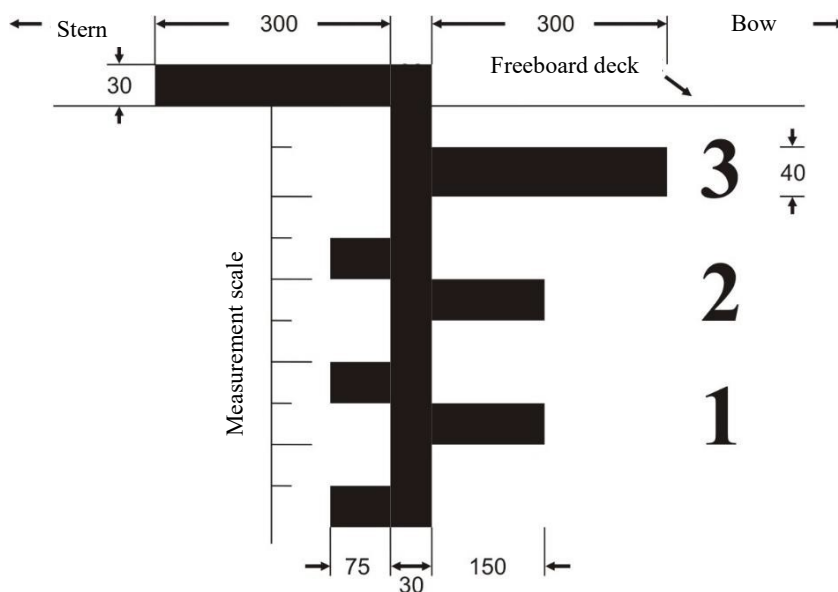


Figure 3

II. Chapter 8 “Engine design”

Article 8.10 Noise emitted by vessels

1. The noise produced by a vessel under way, and in particular the engine air intake and exhaust noises, shall be damped by using appropriate means.
2. The sound pressure level of the noise generated by a vessel under way shall not exceed 70 dB(A) at a lateral distance of 25 m from the ship's side.
3. Apart from transshipment operations, the sound pressure level of the noise generated by a stationary vessel shall not exceed 60 dB(A) at a lateral distance of 25 m from the ship's side.

III. Chapter 10 “Electrical equipment and installations”

Article 10.11 Batteries, accumulators and their charging devices

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14. For the simultaneous supply of consumer equipment while charging, the power requirements of the consumer equipment must be taken into account when selecting the charger. A charging voltage of up to a maximum of 120 % of the rated voltage must be observed irrespective of the current power requirements. The figure increases to 125 % for traction batteries.

15. The requirements of European Standard EN 62619:2017 and EN 62620:2015 shall apply for lithium-ion accumulators.

...

17. Rooms in which lithium-ion accumulators are stored shall comply with the following requirements:

- a) These rooms shall be protected against fire of one or several lithium-ion accumulators on the basis of a fire protection concept developed by an expert
 - aa) having regard to the other equipment located in the same room,
 - bb) having regard to instructions of the manufacturer of the lithium-ion accumulators,
 - cc) including provisions for alarm systems.

A fire protection concept may be dispensed with if the lithium-ion accumulators are stored in a fireproof enclosure, which is equipped

- aa) with at least one monitoring device (fire and thermal runaway) and
 - bb) by derogation from article 13.06, with one suitable fixed fire-extinguishing installation for protecting objects.
- b) In the case referred to in (a) first sentence, these rooms shall be shielded with A60 partitions.
- c) These rooms or the lithium-ion accumulators housed in a fireproof enclosure shall be mechanically ventilated to the open deck. The exhaust outlet of the ventilation shall be located in such a way that the safety of persons on board is not endangered.

These requirements do not apply if the cumulative capacity of the lithium-ion accumulators in the room is below 20 kWh.

18. The requirements of (16) and (17) do not apply to accumulators with a charging power of less than 0.2 kW.

IV. Chapter 13 “Equipment”

Article 13.03 Portable fire extinguishers

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2. For the portable fire extinguishers required by (1), only powder type extinguishers with a content of at least 6 kg or other portable extinguishers with the same extinguishing capacity may be used. They shall be suitable for Class A, B and C fires.

By way of derogation on vessels with no liquefied gas installations, spray foam fire extinguishers using aqueous film-forming foam (AFFF) frost proof to –20 °C are permissible even if they are unsuitable for Class C fires. These fire extinguishers shall have a minimum capacity of 9 litres.

In rooms where fires involving vegetable or animal oils and fats are likely to occur the Inspection body may require one or more portable fire extinguishers suitable for extinguishing Class F fires. Such portable fire extinguishers shall be entered in item 52 of the inland navigation vessel certificate.

All extinguishers shall be suitable to extinguish fires in electrical systems of up to 1000 V.

3. In addition, powder, water or spray foam fire extinguishers may be used which are suitable at least for the class of fire most likely to occur in the room for which they are intended.

V. Chapter 15 “Accommodation”

Article 15.02 Special design requirements for accommodation

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11. Doors

a) shall have an opening whose upper edge is at least 1.90 m above deck or above the floor and a clear width of at least 0.60 m. The prescribed height may be achieved by means of sliding or hinged covers or flaps;

b) shall be capable of being opened outwards from both sides;

c) which are located along escape routes shall not hinder the evacuation of persons when they are opened;

d) which are locked from the inside shall be capable of being opened from the outside in an emergency.

Sills shall not be more than 0.40 m high, but shall nonetheless comply with the provisions of other safety regulations.”

VI. Chapter 19 “Special provisions applicable to passenger vessels”

Article 19.07 Propulsion system

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2. The second independent propulsion system must be located in a separate engine room or electrical service room. If both rooms have common partitions, these shall be built according to Article 19.11(2).

VII. Chapter 26 “Special provisions applicable to recreational craft”

Article 26.01 Application of Part II

1. Recreational craft shall meet the following requirements:

...

h) from Chapter 13:

Article 13.01(2), (3) and (5) to (14), Article 13.02(1) (a) to (c), and (3) (a) and (e) to (h), Article 13.03(1)(a), (b) and (d); however, there shall be at least two fire extinguishers on board; Article 13.03(2) to (6), Article 13.04, Articles 13.04, 13.05, 13.07 and 13.08;

...

VIII. Annex 8 “Supplementary provisions applicable to craft operating on fuels with a flashpoint equal to or lower than 55°C”

2.8 LNG bunkering system

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2.8.6 The bunkering manifold shall be designed to withstand normal mechanical loads during bunkering. The connections shall be of dry-disconnect type and equipped with appropriate additional safety dry break-away couplings.

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2.8.9 All the components of the bunkering system shall be in accordance with European Standard EN 20519:2017 (5.3 to 5.7).

IX. Instructions for the application of the technical standard

A. ESI-I-1 “Completion of the inland navigation vessel certificates”

4. Explanations of individual items

Self-explanatory items are not mentioned below.

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10. In respect of vessels with Union inland navigation certificate allowed to navigate on the Rhine, i. e.

a) those which comply fully with requirements of this Standard including the transitional provisions of Chapter 32, and

b) those which make no use of the transitional provisions of Chapter 33 or the reductions provided for zone 4,

the following is to be added to the indent “- on EU waterways in Zone(s)^(*)”:

a) Rhine or

b) zone R.

As a reminder, based on Article 1.04 and Annex O of the Rhine vessel inspection regulations (RVIR), the Central Commission for the Navigation of the Rhine (CCNR) has recognised these Union certificates as being equivalent, thereby entitling the holder to travel on the Swiss section of the Rhine as far as the Mittlere Brücke.

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B. ESI-II-9 “Special anchors with reduced mass”**Section 1
Authorized special anchors**

Table, the new entry 18 is added

<i>Anchor nr.</i>	<i>Accepted reduction of the anchor mass (%)</i>	<i>Competent authority</i>
18. HYT-12 HHP anchor	40 %	Netherlands
