

Passenger transport data

- ▶ In the EU area there are at least 40 million pax/year transported by about 3000 small daily trip vessels, mainly built in fiberglass. In view of the 2016/1629 expansion at the pan-European level, we must consider even larger numbers (only in the Russian Federation there are 13 million pax/year and 1500 passenger ships).

Introduction

SC.3/WP.3 has recently started work on aligning resolution No. 61, harmonized with Directive 2006/87/EC, with the European Standard laying down technical requirements for inland navigation vessels (ES-TRIN) developed by the European Committee for drawing up Standards in the field of Inland Navigation (CESNI).

Directive 2006/87/EC

- ▶ Directive 2006/87/EC, since its entry into force, had a negative impact on the construction and operation of this vessel type which resulted in:
 - a significant drop in orders for vessels of this type in many European countries
 - purchasing second-hand boats by shipowners and a few number of newbuildings that were possible only on the basis of exemptions granted by the Classification Societies and administrations, therefore, with a restricted navigation area.

Directive 2006/87/EC

- ▶ The difficulties of application don't depend on the navigation area, nor on the country in which they operate, but only on technical reasons that then lead to the development of requirements suitable for this type of unit

Directive 2006/87/EC

- ▶ The entry into force of Directive (EU) 2016/1629 which repeals Directive 2006/87/EC, is not likely to improve the existing situation. However, some classification societies apply special requirements for passenger ships not exceeding 24 metres in length and allowed to carry up to a maximum of 150 passengers
- ▶ The proposed amendment is aimed to resolve this and, if adopted as a part of the annex to resolution No. 61, could make it an efficient tool addressing the needs of the sector.



Draft chapter 15B

15B-1 General

- 15B-1.1 For the purpose of the chapter, the term “passenger daily trip vessel” means passenger daily trip vessels not exceeding 24 metres in length and authorized to carry up to a maximum of 150 passengers.
- 15B-1.2 This chapter applies to passenger daily trip vessels with hulls made of steel, fibre reinforced plastic (FRP) or aluminium alloys.

Draft chapter 15B

15B-2 Strength and stability

- ▶ 15B-2.1 The hull strength shall comply with the requirements of a recognized Classification Society.
- ▶ 15B-2.2 When checking the intact stability by means of a calculation, provisions of chapter 15 are applied with due regard of the following:
 - (a) the heeling angle resulting from moments due the sum of the two moments due to passengers and wind shall not exceed 12°
 - (b) the heeling angle resulting from moments due to the turning of the vessel shall not exceed 10° and shall be calculated according to the following formula:

Draft chapter 15B

15B-2 Strength and stability

$$M_r = C_{dr} \times C_B \times v^2 \times \frac{\Delta}{L_{WL}} \times \left(KG - \frac{T}{2} \right), \quad \text{where:}$$

- ▶ C_{dr} = coefficient; $C_{dr} = 0.20$;
- ▶ C_B = block coefficient (if not known, taken as 1.0);
- ▶ v = maximum speed of the vessel, in [m/s];
- ▶ Δ = displacement of the vessel, in [t];
- ▶ L_{WL} = length of waterline at the maximum draught, in [m];
- ▶ KG = distance between the centre of gravity and the keel line, in [m];
- ▶ T = draught, in [m].



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15B-2 Strength and stability

- ▶ 15B-2.3 For a heeling moment resulting from:
 - (a) the sum of the two moments due to passengers and wind;
 - (b) the moments due to turning;the residual freeboard shall be not less than 0,20 m.

Draft chapter 15B

15B-2 Strength and stability

- ▶ **15B-2.3** For a heeling moment resulting from:
 - (a) the sum of the two moments due to passengers and wind;
 - (b) the moments due to passengers and turning;the residual freeboard shall be not less than 0 m.

Draft chapter 15B

15B-2 Strength and stability

- ▶ 15B-2.4 For vessels with windows or other openings in the hull located below the bulkhead decks and not closed watertight, the residual safety clearance shall be at least 0.10 m on the application of:
 - (a) a heeling moment resulting from the sum of the two moments due to passengers and wind;
 - (b) a heeling moment resulting from the moments due to turning.



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Draft chapter 15B

15B-2 Strength and stability

- ▶ 15B-2.4 For vessels with windows or other openings in the hull located below the bulkhead decks and not closed watertight, the residual safety clearance shall be at least 0 m on the application of:
 - (a) a heeling moment resulting from the sum of the two moments due to passengers and wind;
 - (b) a heeling moment resulting from the sum of the two moments due to passengers and turning.

Draft chapter 15B

15B-2 Strength and stability

- ▶ 15B-2.5 Requirements to prove the damaged stability it's not necessary for passenger vessels, provided that shall be proven the following points:
 - (a) Vessel that is not classified as “high speed vessel”;
 - (b) Vessel cruising within one hour from safe anchorage or harbor

Draft chapter 15B

15B-2 Strength and stability

▶ 15B-2.5

For passenger vessels authorized to carry up to a maximum of 150 passengers and with a length not more than 24 m, requirements for fixed value of the extent of longitudinal damage shall not apply

Draft chapter 15B

15B-3 Safety clearance and freeboard

- ▶ 15B-3.1 The freeboard shall be at least equal to the sum of:
 - (a) the additional lateral immersion, which, measured on the outside plating, is produced by the heeling angle due to passengers + wind, or to turning, and
 - (b) the residual freeboard according to 15B-2.3.

For vessels without a bulkhead deck, the safety clearance shall be at least 500 mm.

Draft chapter 15B

15B-3 Safety clearance and freeboard

- ▶ 15B-3.2 The safety clearance shall be at least equal to the sum of:
 - (a) the additional lateral immersion, which, measured on the outside plating, is produced by the heeling angle due to passengers + wind, or to turning, and
 - (b) the residual safety clearance according to 15B-2.4.
- However, the remaining freeboard shall be not less than 300 mm.

Draft chapter 15B

15B-4 Passenger rooms and areas

- ▶ 15B-4.1 For passenger vessels engaged in voyages not longer than 30 minutes and/or at a distance less than 8 km from the shore, toilets for passengers may be dispensed with
- ▶ 15B-4.2 Uncovered bow and stern areas may be considered as muster areas, provided that they are equipped with handrails, exit lattice gates on both sides, and two exit doors in the passenger spaces
- ▶ 15B-4.3 Passenger daily trip vessels engaged in voyages not longer than 30 minutes and/or at a distance less than 8 km from the shore, may not be equipped with special areas and places intended for use by persons with reduced mobility

Draft chapter 15B

15B-5 Propulsion system

- ➔ 15B-5.1 For passenger vessels engaged in voyages not longer than 30 minutes from the shore and/or at a distance less than 8 km from a safe harbour, the second independent propulsion system is not required.
- ➔ 15B-5.2 In case of failure or malfunctioning of the drive unit, it shall be possible to bring the second independent drive unit or the manual drive into operation within 30 s.

Draft chapter 15B

15B-6 Life-saving appliances

- ▶ 15B-6.1 In case a passenger daily trip vessel has good manoeuvrability parameters and equipped with a video camera located in the stern and it is engaged in voyages not longer than 30 minutes and/or at a distance less than 8 km from the shore, ship's boats may be dispensed with.
- ▶ 15B-6.2 Passenger vessels engaged in voyages not longer than 30 minutes and/or at a distance less than 8 km from the shore, shall be equipped with the following individual life-saving appliances: individual life jackets for all persons on board, additional lifejackets for children in quantity equal to 10% of the total number of persons and at least 3 lifebuoys.

Thank you for your attention

