ECE/TRANS/SC.3/188

### ECONOMIC COMMISSION FOR EUROPE

### INLAND TRANSPORT COMMITTEE

Working Party on Inland Water Transport

# Guidelines for passenger vessels also suited for carrying persons with reduced mobility



UNITED NATIONS New York and Geneva, 2010



## Guidelines for passenger vessels also suited for carrying persons with reduced mobility

### **Resolution No. 69**

(adopted by the Working Party on Inland Water Transport on 15 October 2010)

The Working Party on Inland Water Transport,

*Noting* the request by the UNECE Inland Transport Committee to its subsidiary bodies to continue and intensify their work on facilitating the transport of people with reduced mobility (ECE/TRANS/200, paragraphs 115–116),

*Recognizing* the need to ensure the right of persons with reduced mobility to participate fully in the social life and to enjoy living conditions equal to those of their fellow citizens,

*Taking into account* Resolution No. 25 on the Guidelines for Passenger Vessels also suited for Carrying Disabled Persons, of 14 November 1986,

Taking also into account Chapter 15 "Special provisions for passenger vessels" of the annex Resolution No. 61 concerning the Recommendations on Harmonized Europe-Wide Technical Requirements for Inland Navigation Vessels and its provisions pertaining to persons with reduced mobility,

*Considering* the most recent standards related to people with reduced mobility adopted at international and regional levels,

*Seeking* to ensure that persons with reduced mobility are able to travel and move safely on board vessels and that in an emergency situation such persons have the same level of safety as other passengers,

*Bearing in mind* the report of the Working Party on the Standardization of Technical and Safety Requirements in Inland Navigation on its thirty-seventh session (ECE/TRANS/SC.3/WP.3/74, paragraph 33);

1. *Decides* to replace the annex to Resolution No. 25 with the provisions annexed to the present Resolution;

2. *Recommends* Governments, to take such steps as may be necessary to supplement their regulations on the construction and equipment of inland navigation vessels, taking duly into account the present "Guidelines for Passenger Vessels also Suited for Carrying Persons with Reduced Mobility", reproduced in the annex to this resolution;

3. *Invites* Governments, to inform the Executive Secretary of the Economic Commission for Europe whether they accept this resolution;

4. Requests the Executive Secretary of the Economic Commission for Europe to include periodically the question of the application of this Resolution on the agenda of the Working Party on Inland Water Transport.

### Annex

## Guidelines for passenger vessels also suited for carrying persons with reduced mobility

1 Objective and scope

1.1 The Guidelines provide information concerning the adaptation of equipment and arrangements of passenger vessels to facilitate their use by persons with reduced mobility, i.e. persons facing particular problems when using public transport, such as the elderly and the handicapped and persons with sensory disabilities, persons in wheelchairs, pregnant women and persons accompanying young children.

1.2 These Guidelines are aligned with, and serve to develop further, relevant provisions of Chapter 15 "Special provisions for passenger vessels" of Resolution No. 61 containing Recommendations on Harmonized Europe-Wide Technical Requirements for Inland Navigation Vessels, as amended (ECE/TRANS/SC.3/172 and Adds.).

1.3 In this context, persons with reduced mobility are considered to be an integral part of the passengers using the vessel. These Guidelines do not cover vessels specially built for the carriage of persons with reduced mobility. The Guidelines may serve as a guide to ship-owners and shipbuilders and particularly to facilitate proper planning for new construction or major conversion work

- 2 Areas provided for use by persons with reduced mobility
- 2.1 General
- 2.1.1 Areas provided for use by persons with reduced mobility shall include:
  - (a) a place where life-saving appliances are stowed or issued in an emergency;
  - (b) seats;
  - (c) at least one suitably-adapted toilet and at least one suitable wash-room;
  - (d) connecting corridors;
  - (e) suitably-adapted cabins.

2.1.2 The quantity of seats and/or cabins suited for persons with reduced mobility shall be determined by the Administration on the basis of experience, taking into account the number of persons with reduced mobility that – over a lengthy period – are most frequently onboard simultaneously.

2.1.3 With the exception of width of doors (as indicated in paragraph 2.6 below), no other requirements are imposed for the special arrangement of cabins. It is the responsibility of the ship-owner Administration to make any further necessary arrangements.

2.2 Passenger areas

2.2.1 Passenger areas and corridors suited for persons with reduced mobility should have a clear width of at least 1.30 m so as to be accessible to wheelchairs and be free of doorsteps and sills more than 0.025 m high.

2.2.2 Exits of rooms intended for use by persons with reduced mobility shall have a clear width of at least 0.90 m.

2.2.3 Connecting corridors intended for use by persons with reduced mobility shall have a clear width of 1.30 m. Connecting corridors more than 1.50 m wide shall have hand rails on either side.

2.2.4 Projecting elements should be avoided as much as possible and sharp edges should be rounded off. Especially wardrobes, shelves and cupboards should be set into walls; vertical pipes should as far as possible be located in recesses or corners.

2.2.5 Anti-slip coverings and coatings should be provided, particularly where there are gradients (ramps, cambers), in the gangways and corridors between the various lounges and between the lounges and the stairs. These coverings and coatings should not generate static electricity. Handrails or other means of support may also usefully be provided.

2.3 Gangways for disembarkation

2.3.1 The gangways for passenger disembarkation should have on each side a handrail at a height of 1.00 m and a second at the height of 0.75 m above the actual gangway. It is important for the handrails to extend in length 0.30 m beyond each end of the gangway.

2.3.2 The gangway should have a minimum clear width of at least 0.90 m. Each railing should have at least three stanchions. To allow for the use of wheelchairs, the antislip cross-pieces should not be more than 0.30 m long and 0.03 m high. The holes of perforated surfaces should not be more than 0.01 m wide or 0.03 m long.

2.3.3 The best method of solving the problem caused by the difference in level between the gangway and the pier or deck is to place movable flaps at each end of the gangway.<sup>1</sup>

### 2.4 Door sills and coamings

Door sills in the passenger areas should be avoided wherever possible. If they cannot be avoided, they should have a maximum height of 0.025 m. Open-deck coamings should be kept as low as possible taking into account other requirements in force. They can be eliminated by installing drainage wells, which may be covered by a close-mesh grille and drained outside the hull. If the door sills and coamings should have the height of more than 0.025 m, they should be removable, or consist of a low flexible rubber section or allow clearance by movable ramps.

- 2.5 Stairs and lifts
- 2.5.1 Stairs

2.5.1.1 The stairs should not be too steep (maximum gradient  $32^{\circ}$ ). Spiral staircases are not allowed and the stairs shall not run in a direction transverse to the vessel. The steps should have a maximum height of 0.18 m, a minimum depth of 0.30 m and a clear width of at least 0.90 m. It is particularly important to ensure that the steps are anti-slip and have no projections or hollows.

2.5.1.2 The deck areas immediately before stairs or steps should be properly marked by different floor coverings. Handrails, the front sides of at least the first and the last step as well as the floor coverings at the ends of the stairs shall be colour highlighted. It is advisable to avoid single steps in the corridors, particularly in front of or behind doors.

<sup>&</sup>lt;sup>1</sup> Attention is drawn to the fact that a person in a wheelchair cannot cope with gradients of more than 1:20 (3°) without the help of another person, while ascending a gradient of more than 1:4 (14°) is very difficult even with the help of another person. If a landing stage necessitates a steeply inclined gangway for disembarkation (for example 1:4), the gangway should not exceed 2 m in length.

2.5.2	Lifts
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2.5.2.1 Lifts should have the following dimensions:

- Cabin: at least 1.10 m wide, 1.40 m deep.
  - Lift door: at least 0.80 m clear width (if possible in the form of a sliding or folding door).
  - Control panel: between 0.90–1.20 m above the floor.
- Handrails: 0.90 m above the floor.

2.5.2.2 There should be a clear space of at least 1.40 m x 1.40 m in front of the door of the lift.

### 2.6 Handrails and guardrails

2.6.1 The handrail on each side of the stairs should be placed at a height of 0.90 m above the front edge of the steps, follow the stair without interruption and extend approximately 0.30 m beyond the top and bottom of the stairs without restricting traffic routes. The bars of the handrail should be circular, with a diameter of 0.04–0.05 m and the distance between the handrail and the wall should be at least 0.06 m. At the end of the handrails the bars should be bent apart from the passage.

2.6.2 In addition, handrails should be provided for guidance and support along corridor walls and open-deck superstructures at a height of 0.90 m above the deck.

2.6.3 Parts of the deck intended for use by persons with reduced mobility, and which are not covered, shall be surrounded by a fixed bulwark or guardrail at least 1.10 m high.

#### 2.7 Doors

2.7.1 Except for those opening into corridors, the doors of passenger lounges should open outwards. When open, the doors should fold back against a wall and be capable of being held fast.

2.7.2 Special door-construction such as swing doors and revolving doors should be avoided. In the case of sliding doors, the lower guide-rail should be sunk into the floor. The clear width of the doors should be at least 0.9 m in order to allow the easy passage of wheelchairs. In order to permit access to doors from the direction in which they open, there should be a minimum clearance of 0.60 m between the inner edge of the door frame on the lock side and an adjacent perpendicular wall.

2.7.3 It should not be possible for unauthorized persons to lock or bar the doors of the passenger lounges.

2.7.4 The doors of toilets for persons with reduced mobility should open outwards or should be sliding doors.

#### 2.8 Toilets and wash-rooms

2.8.1 At least one toilet and one wash-room should be accessible to persons with reduced mobility and adapted to their specific needs. Toilets suitable to persons with reduced mobility using wheelchairs should be at least 1.50 m x 1.82 m. The height of the toilet seat should be approximately 0.40 m. Handgrips for persons with reduced mobility should be fixed to the walls and attention given to ensuring that the fittings are quite stable and firmly attached. The toilet-paper holder should be well within reach and a person should be able to use it with one hand.

2.8.2 There should be a free space of 0.60 m height and 0.70 m width under the wash-basin. The height of the upper side of the wash-basin above the floor should be 0.80–0.85 m. If necessary the mirror should extend down as far as the wash-basin.

2.9 Cabins and public areas

2.9.1 Cabins for persons with reduced mobility should where possible be located on the same deck of the vessel, being preferably the deck on which the public area is located. They should be centrally situated and easily accessible. The counters of offices open to the public (for example, the information office and the ticket office) should be accessible to persons with reduced mobility in wheelchairs.

2.9.2 Tables and seats should be so constructed that they will not overturn when used for support. Clearance under tables should be 0.70 m in order to provide a sufficiently large space for the legs to knee-height.

2.9.3 When tables and seats in the lounges or on the deck are permanently fixed, a number of seats (one for every 100 passengers admitted but at least 4) should be specially adapted and reserved for persons suffering from motor disablement.

2.10 Measures for allergic persons

The furnishings shall as far as possible be made from non-allergenic material.

3 Information, communication and services

3.1 Markings, indications, signs and lighting

3.1.1 Sills, ramps, guardrails and handrails should be easily recognizable by their different colours.

3.1.2 In order to indicate special lounges and facilities for persons with reduced mobility the appropriate symbols specified in international regulations should be used. The direction indicator signs on the vessel and the instruction panels regarding conduct on board should be attached to the walls and not to the doors. The letters should be at least 0.015 m high. The text or symbol should stand out clearly against the main colour of the sign, which should in turn contrast with its background.

3.1.3 Signs indicating the emergency exits or containing prohibitions or obligations must be capable of being lit so as to be clearly visible.

3.1.4 Sufficient lighting in areas intended for use by persons with reduced mobility should be provided and shall meet higher requirements than for other passenger areas.

3.2 Loudspeakers, public address systems

It should be possible to reach all the decks and cabins accessible to passengers by a loudspeaker system. The loudspeakers should be sufficiently powerful for messages to be clearly distinguished from background noise (for example, engines, ventilators, etc.).

3.3 Information

Details of information offices and possibilities of assistance should be displayed at appropriate points on the vessel.

- 4 Safety
- 4.1 General provisions

If the requirements in force do not provide for them the following safety measures must be given special attention.

4.2 Disembarkation

4.2.1 Passenger cabins for persons with reduced mobility should not be located below the disembarkation deck.

4.2.2 Exits normally used for embarking and disembarking people with reduced mobility shall have a clear width of at least 1.50 m.

4.2.3 Vessels should have on each side of the vessel on the freeboard deck at least one passenger disembarkation place with a minimum free opening for disembarkation of 1.50 m in width.

4.2.4 Accommodation for persons with reduced mobility should be so arranged that evacuation of all passengers is possible at any time to an open and sufficiently large deck. From this deck there should be in any case one emergency disembarkation opening of 1.00 m in width.

4.3 Alarm system

4.3.1 In rooms in which, as a general rule, persons with reduced mobility cannot be seen by crew members, on-board personnel or passengers, the possibility of triggering an alarm should be provided for. This applies to toilets and wash-rooms intended for use by persons with reduced mobility.

4.3.2 In areas intended for use by persons with reduced mobility, the passenger alarm system shall provide suitable visual and audible alarms.

4.4 Special protection against fire

4.4.1 Liquid fuel having a flash-point of 55 °C and lower should not be used, except for outboard engines for lifeboats.

4.4.2 Engine rooms should be equipped with a fixed fire-extinguishing installation of a suitable type. This installation should be capable of being activated from outside the engine room.

4.4.3 There should be at least two independent fire pumps on board, one of which should be installed outside the main engine room. The capacity of each fire pump and the number and distribution of fire hydrants should be such that any part of the vessel can be reached from at least two separate fire hydrants, each with a single length of fire hose.

4.4.4 Bulkheads and doors between public corridors and cabins and between the cabins themselves, bulkheads and doors of staircases connecting more than two decks, as well as ceilings and surface coatings of bulkheads and planking should be fire-resistant.

4.4.5 On vessels with cabins, all accommodation and cabins for passengers, crew and shipboard personnel should be equipped with suitable sprinkler systems. The fire dampers prescribed for air and ventilation ducts should close automatically when the temperature of the air in the ducts exceeds 70 °C. It should also be possible to close them manually from a location permanently manned by shipboard personnel or crew members.

4.5 Additional provisions

4.5.1 Lifejackets should be kept within reach at appropriate points on the gangway giving access to exits. In addition, cabins suited for persons with reduced mobility should be provided with lifejackets.

4.5.2 Lifeboat and liferaft stations should be close to accommodations used by persons with reduced mobility. Arrangements should be provided for transfer of persons with reduced mobility from wheelchairs to lifeboats and liferafts and their launching to the water.

4.5.3 Lifeboats and liferafts intended for use by persons with reduced mobility shall bear appropriate marking. Beacons emitting visual and audible signals should be installed in the vicinity of the collective life-saving appliances to facilitate the orientation of persons with impaired eyesight and hearing.

4.5.4 The scheduled period of supply of emergency power should be at least 60 minutes.

4.5.5 If the emergency source of electric power is not located above the bulkhead deck, the engine room and the space occupied by the emergency source of electric power should be separated from adjacent spaces by fire – and watertight bulkheads.

4.5.6 Adequate emergency lighting shall be provided in areas intended to be used by persons with reduced mobility-and in their cabins.

4.5.7 Vessels should be equipped with a radiotelephone installation for: public communication; Ship-reporting and ship-to-ship communication.

4.6 Safety instructions

4.6.1 The safety rota for the crew and shipboard personnel should state the special safety measures required for persons with reduced mobility in an emergency.

4.6.2 The safety plan must designate clearly and precisely the areas intended for use by persons with reduced mobility.

4.6.3 The safety rota and the safety plan displayed in the areas intended for use by persons with reduced mobility shall be such that they can, where possible, also be read by person with impaired eyesight, and shall be displayed at a height so that wheelchair users can read them as well.