

**Translation. Only the Danish version has legal validity.**

*Order no. 956 of 26 September 2012 issued by the Danish Maritime Authority*

## **Order on small vessels carrying a maximum of 12 passengers**

In pursuance of section 1(3), section 3, section 5, section 17(5) and section 32 of the act on safety at sea (*lov om sikkerhed til søs*), cf. consolidated act no. 654 of 15 June 2010, as enacted by decree no. 882 of 25 August 2008 on the entry into force of the act on safety at sea for Greenland, after consultation with the Government of Greenland, and by authority, the following provisions are laid down:

### **Part 1**

#### *General provisions*

**Section 1.** The purpose of this regulation is to enhance the safety of commercial passenger voyages by small vessels carrying passengers by determining the framework within which the companies and persons carrying out the voyages shall independently establish appropriate safety measures and determine a high safety level for passenger voyages.

**Section 2.** This regulation shall apply to passenger voyages with up to 12 passengers by vessels with a length L below 15 metres and scantlings below 100. The order shall also apply to wooden vessels of primitive build, including viking ships and vessels not propelled by mechanical means.

*Subsection 2.* This order shall not apply to vessels approved to carry more than 12 passengers as well as to ships of war and troop ships.

*Subsection 3.* This order shall not apply to voyages not carried out as part of commercial activities.

*Subsection 4.* In case of doubt whether this order applies, the Danish Maritime Authority shall decide hereon. School and training institutions' voyages with pupils, hospitals' voyages with patients as well as treatment centres, day-care centres and after-school centres' voyages with the persons taking part in the scheme shall be considered voyages carried out as part of commercial activities.

**Section 3.** The shipowner shall ensure:

- 1) that the vessel is used in accordance with good seamanship and that human lives at sea are secured in a fully satisfactory way;
- 2) that the vessel is manned, constructed, equipped and maintained so that it is suitable for its purpose.

**Section 4.** The shipowner shall lay down written safety instructions for safe use of the vessel that:

- 1) identify the company or person responsible for passenger voyages (shipping company/shipowner);
- 2) describe the navigational activities for which the vessel is used;
- 3) describe the risk factors associated with the navigational activities;
- 4) describe the measures taken to reduce these risks;
- 5) describe the vessel, including its technical specifications, the equipment that shall be available on board as well as its maintenance;
- 6) determine and describe the crew and training to be had by the vessel's master, instructors and crew at any time;

- 7) determine the navigational restrictions to the vessel that the master shall observe in order that the voyages are safe. This includes an indication of the waters, seasons, weather conditions, water temperatures, the maximum number of persons on board, etc. under which the vessel shall be operated;
- 8) determine the measures that shall have been taken on board and ashore so that it is, insofar as altogether possible, ensured in case of fire, capsizing, collision and similar accidents that all those on board can be saved and kept alive until assistance arrives, also if the persons are lying in the water;
- 9) ensure that it is always possible to call assistance in case of accidents;
- 10) ensure that information about the number of persons on board is known and kept ashore and is easily accessible in case of a rescue operation;
- 11) ensure that safety instructions are always given to new persons on board before the start of the voyage;
- 12) describe how to follow up on unintended incidents or accidents.

*Subsection 2.* The vessel's owner shall ensure that the one drawing up the safety instructions has the relevant maritime knowledge, skills and competences for navigating the vessels concerned, including the following:

- 1) Has thorough knowledge of navigation with the type of vessel concerned.
- 2) Has thorough knowledge of maritime safety, good seamanship and rescue at sea.
- 3) Has knowledge of the use of maritime radio systems.
- 4) Has an understanding of communication at sea.
- 5) Has thorough knowledge of the importance of relevant factors to the planning of the voyage.
- 6) Has thorough knowledge of assessing the importance of the weather conditions to the voyage.

*Subsection 3.* Guidelines for the drawing up of safety instructions are shown in annex IV to this order.

*Subsection 4.* The shipowner shall ensure that the safety instructions are always true in relation to the current navigational activities.

*Subsection 5.* The safety instructions shall be known by the vessel's master and be accessible to him in connection with the use of the vessel.

*Subsection 6.* Passengers shall have a possibility of familiarising themselves with the safety instructions before the start of the voyage.

*Subsection 7.* The safety instructions shall be forwarded to the Danish Maritime Authority upon request.

*Subsection 8.* The Danish Maritime Authority may control whether the safety instructions, cf. section 4, are adequate in relation to the current navigational activities carried out in practice and whether they determine a safety level taking account of the guidance provided in annex IV.

**Section 5.** The master of a vessel covered by this order shall ensure that the vessel is, in consideration of the actual conditions:

- 1) navigated in accordance with good seamanship and that human lives at sea are secured in a fully satisfactory way;
- 2) navigated in accordance with the safety instructions established by the shipowner, cf. section 4.

**Section 6.** The following definitions shall apply for the purposes of this regulation:

- 1) "Breadth B": The greatest breadth of the vessel.
- 2) "Scantlings": The length L1 multiplied by the breadth B.<sup>1</sup>
- 3) "Length L1": The length measured from the foreside of the intersection of the plating with the topside of the deck at the stem to the after side of the intersection of the plating with the deck at the stern. On open vessels, the length shall be measured at the topside of the gunwale.

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<sup>1</sup> For fishing vessels, the scantlings are the vessel's Loa multiplied by the vessel's breadth (Loa x B).

- 4) “Professional training in navigation”: Navigation where one or more persons on board are trained with a view to passing a test in navigation or completing a relevant training period with a view to training in navigation in the relevant type of vessel.

## Part 2

### *Requirements for construction, equipment, surveys, registration and certificates*

**Section 7.** Vessels with scantlings below 20 shall, in addition to what is stipulated in this order, meet the requirements for construction, equipment, surveys, registration and certificates shown in annex I.

**Section 8.** Vessels with scantlings of or above 20 shall, in addition to what is contained in this regulation, meet the provisions shown in annex II to this regulation as well as Notice F from the Danish Maritime Authority.

**Section 9.** Vessels exclusively used for professional training in yachting shall, instead of what is contained in section 8 or 9, meet the requirements for construction and equipment shown in annex III. The Danish Maritime Authority may permit that other similar voyages with up to 12 passengers are carried out by vessels meeting the requirements for construction and equipment shown in annex III.

**Section 10.** Where this order and the associated annexes require that a particular fitting, material, appliance or apparatus, or type thereof, shall be fitted or carried in a vessel, or that any particular provision shall be made, the Danish Maritime Authority may allow any other fitting, material, appliance or apparatus, or type thereof, to be fitted or carried, or any other provision to be made in that vessel, if it is satisfied by trial thereof or otherwise that such fitting, material, appliance or apparatus, or type thereof, or provision, is at least as effective as that required by this order.

*Subsection 2.* The Danish Maritime Authority shall accept tests carried out by recognised test institutes, including test institutes in other EU member States and in countries covered by the EEA agreement providing appropriate and satisfactory guarantees of a technical, professional and impartial nature.

## Part 3

### *Penalty provisions*

**Section 11.** Contraventions of this order shall be liable to punishment by fine or imprisonment for a period not exceeding 1 year.

*Subsection 2.* The penalty may be increased to imprisonment for a period not exceeding 2 years if

- 1) the contravention has caused damage to life or health or risk of such damage,
- 2) an injunction or order has previously been issued in connection with the same or equivalent situations, or
- 3) the contravention has produced or has been intended to produce financial benefits to the contravener or others.

*Subsection 3.* It shall be considered especially aggravating circumstances if the violation has resulted in damage to the life or health or risk of such damage to young persons below the age of 18, cf. subsection 2(i).

*Subsection 4.* If the financial benefit achieved is not confiscated, special consideration shall be paid to the size of the achieved or intended financial benefit when determining fines, including supplementary fines.

*Subsection 5.* Companies etc. (legal personalities) may be liable to punishment according to the provisions of chapter 5 of the penal code (*straffeloven*).

**Section 12.** If the circumstance is covered by the decree on the entry into force for Greenland of the act on safety at sea, measures may be laid down in accordance with the criminal code for Greenland.

*Subsection 2.* The circumstances referred to in section 11(2) and (3) shall be regarded as aggravating circumstances.

*Subsection 3.* If the financial benefit achieved is not confiscated, cf. chapter 3 of the penal code, special consideration shall be paid to the size of the achieved or intended financial benefit when determining fines, including supplementary fines.

*Subsection 4.* If the contravention has been committed by the State, the Government of Greenland, a municipality, a municipal cooperative covered under section 64 of the Landsting act on municipal councils and local authorities etc. or a local authority, liability to pay a fine may be incurred by the relevant public authority as such.

*Subsection 5.* If the relevant party is not resident in Greenland or his connection to Greenland society is otherwise so remote that the prerequisites for measures to be taken do not exist, legal proceedings may be instigated or the case may be referred for trial in Denmark.

#### Part 4

##### *Entry into force*

**Section 13.** Vessels that have been approved by the Danish Maritime Authority before the entry into force of this order and hold a permit to carry passengers shall have a right to continue carrying passengers in accordance with the conditions stipulated in the permit for as long as the permit is valid.

*Subsection 2.* The safety instructions, cf. section 4, shall, irrespective of subsection 1, be established for all vessels no later than three months after the entry into force of this order.

**Section 14.** This order shall enter into force on 1 October 2012.

*Subsection 2.* Technical regulation of 2 December 2003 on small vessels carrying a maximum of 12 passengers shall be repealed.

*Danish Maritime Authority, 26 September 2012*

Per Sønderstrup / Erik I. Tvedt

## Vessels with scantlings below 20

### **Regulation 1 – Survey, approval and registration of vessels with a propelling power below 100 kW**

The Danish Maritime Authority may control vessels with scantlings below 20 and with a propelling power below 100 kW. The control may include compliance with the safety provisions of the regulation, including especially whether the shipowner's safety instructions pursuant to section 5 are adequate in relation to the actual navigational activities drawn up in consideration of the guidance of annex IV and have been carried out in practice on the vessel.

### **Regulation 2 – Survey, approval and registration of vessels with a propelling power of or above 100 kW**

- 1 Vessels with a propelling power of or above 100 kW shall, at the shipowner's request, be reported to the Danish Maritime Authority and be subject to the following surveys:
  - 1.1 An initial survey before the vessel is put in service.
  - 1.2 A renewal survey once every 48 months.
  - 1.3 An intermediate survey within 21-27 months before the date of the next renewal survey.
  - 1.4 Additional surveys according to the Danish Maritime Authority's assessment in case of major repairs, renewals or where the vessel's use is changed considerably in relation to the shipowner's safety instructions previously in force, cf. section 5.
- 2 The surveys referred to above shall be carried out as follows:
  - 2.1 The initial survey shall include an inspection of the vessel's structure, machinery and equipment, and of whether it is suitable for the trade for which it is intended. In addition, the initial survey shall include a control of compliance with the safety instructions of this regulation, including especially whether the shipowner's safety instructions pursuant to section 4 are adequate in relation to the actual navigational activities in consideration of the guidance of annex IV. Furthermore, it shall be controlled whether the shipowner's established navigational restrictions for the vessel follow the principles of indicating trade areas stipulated in Notice F from the Danish Maritime Authority.
  - 2.1 The renewal survey shall include an inspection of the structure, machinery and equipment in order to ensure that they meet the requirements of the regulation, are in satisfactory order and suitable for the trade for which the vessel is intended. In addition, the inspection shall include a control of compliance with the safety instructions of this regulation. It shall especially be assessed whether the shipowner's safety instructions pursuant to section 4 continue to be adequate in relation to the actual navigational activities and whether they have been drawn up in consideration of the guidance of annex IV and carried out in practice on board the vessel.
  - 2.3 Intermediate surveys shall be carried out by the shipowner as a self-regulatory control by forwarding the shipowner's safety instructions, cf. section 4, to the Danish Maritime Authority with a declaration that the instructions are still adequate, that the structure, equipment and machinery have been controlled and maintained and that the vessel is still fit for the trade for which it is intended.

### **Regulation 2 – Certificates and documentation for vessels with a propelling power of or above 100 kW**

- 1 A "Permit to carry passengers" shall be issued by the Danish Maritime Authority after a completed initial or renewal survey for a period not exceeding 48 months. After a completed intermediate survey, the date of this survey shall be endorsed by the shipowner. The permit shall contain information about

the vessel's trade area, the maximum number of passengers permitted on board and the number of passengers as well as the latest date of the next intermediate survey and renewal survey. The validity of the permit shall cease if surveys have not been held within the dates stipulated.

- 2 When a renewal survey is completed within three months before the expiry date, the new permit shall be valid to a date not exceeding 48 months from the date of expiry of the existing permit.
- 3 When a renewal survey is completed more than three months before the expiry date, the new permit shall be valid to a date not exceeding 48 months from the date of completion of the renewal survey.
- 4 When a renewal survey is completed after the date of expiry of the existing permit, the new permit shall be valid to a date not exceeding 48 months from the date of expiry of the existing permit.
- 5 If, at the date of expiry of an existing permit, the Danish Maritime Authority is informed that a vessel is laid up, the new permit shall be valid until a date not exceeding 48 months from the date of the renewal survey.
- 6 The permit shall be issued in duplicate, and one of them shall be located in a place on board that is conspicuous to the passengers, while the other shall be kept together with the shipowner's safety instructions that shall be accessible to the vessel's master in connection with the use of the vessel.
- 7 No vessel shall be engaged in service with passengers without the permit mentioned in subsection 1 or outside the trade area mentioned in the permit or with more passengers than mentioned therein.

#### **Regulation 4 – Documentation**

- 1 The shipowner's safety instructions shall have been gone over together with and be accessible to the vessel's master in connection with the use of the vessel.

#### **Regulation 5 – Construction**

- 1 The vessel shall be so constructed that it is, as regards strength, buoyancy, stability and the ability to resist weather and sea, suitable for the use given in the shipowner's safety instructions.

#### **Regulation 6 – Fire protection**

- 1 Where there is a risk of fire on board, appropriate measures shall have been taken to prevent this.
- 2 Measures shall have been taken against the spread of fire on board. This may have the form of suitable fire-extinguishing means on board or procedures ensuring that there is no risk to the persons on board in case of a fire.

#### **Regulation 7 – Equipment**

- 1 Where it has been considered relevant according to the shipowner's safety instructions and the risk factors assessed herein, the vessel shall be arranged and fitted with means for the following:
  - 1.1 Retrieval from the water of persons who have fallen over board.
  - 1.2 Discharge.
  - 1.3 First-aid treatment.
  - 1.4 Anchoring and mooring.
  - 1.5 Emergency propulsion.
  - 1.6 Navigation.
  - 1.7 Communication with other vessels or the shore.
  - 1.8 To attract attention with a view to being assisted in emergencies.
  - 1.9 Thermal protection of the crew and passengers.
  - 1.10 Spare parts and tools.
  - 1.11 Additional equipment for ensuring the health and safety of those on board.
  - 1.12 Prevention of pollution of the marine environment.

- 1.13 Deck shelter or other protection against the weather.
- 1.14 Shielding of propellers, motors, rotating parts and hot surfaces.
- 1.15 Instruction in the operation of equipment, motors and the vessel in general.
- 2 The vessel shall be fitted with light, sound and signalling equipment in accordance with the current version of the international regulations for preventing collision at sea and local navigational regulations.
- 3 The vessel shall be equipped with life-jackets for all those on board that fit all those on board in terms of buoyancy and size.
  - 3.1 Life-jackets shall be CE-marked.
  - 3.2 Life-jackets used in combination with immersion suits shall have a buoyancy of at least 275 Newton.
  - 3.3 On the condition that the persons on board can swim and that there is an immediate possibility of being retrieved from the water by an accompanying vessel nearby, the required life-jackets may be replaced by CE-marked buoyancy aids provided that they are fitted with reflexes.
  - 3.4 Where buoyancy aids are being used, cf. 3.3, persons shall wear supplementary clothing in signalling colours to increase the visibility when lying in the water. If the buoyancy aids are made of signalling colours, the requirement for supplementary clothing shall be considered met.
- 4 The vessel shall be equipped with one or more approved SOLAS liferafts or approved four-person liferafts capable of retrieving all those on board or other measures shall have been taken to ensure a similar safety level.

#### **Regulation 8 – Special requirements for fast-going vessels**

- 1 When drawing up the safety instructions, cf. section 4, a special assessment of the presence of the following risk factors shall be included for fast-going vessels (RIBs, speedboats, etc.) as well as a description of the measures taken to reduce these:
  - 1.1 Protection of those on board against the effect of acceleration and braking forces.
  - 1.2 Prevention of back injuries and the like in connection with heavy effects during navigation in waves.
  - 1.3 Presence of personal protective aids for preventing falls over board or injury as a consequence of falls or blows.
  - 1.4 Prevention against being exposed to hypothermia as a consequence of the effects of the wind and sea.
  - 1.5 The effect of high speed on an increased risk of collision or grounding.

#### **Regulation 9 – Special requirements for navigation in Greenland waters**

- 1 When drawing up the safety instructions, cf. section 4, a special assessment of the presence of the following risk factors shall be included for vessels with their trade areas in Greenland waters as well as a description of the measures taken to reduce these:
  - 1.1 Reduced geographical coverage by using means of communication such as mobile telephones, VHF/MF and other means of communication and emergency signalling.
  - 1.2 Reduced possibility of assistance reaching the place of the accident.
  - 1.3 Quickly changing weather conditions.
  - 1.4 Special risk of hypothermia as a consequence of low water and air temperatures.
  - 1.5 Special risks associated with voyages in icy waters.

## **Regulation 10 – Use of CE-marked vessels**

- 1 Vessels that are CE-marked and comply with the recreational craft directive<sup>2</sup> shall be considered to meet the requirements for the vessel's design and construction following from regulations 5 and 6. Council Directive 94/25/EC of 16 June 1994 on the approximation of the laws, regulations and administrative provisions of the Member States relating to recreational craft, as amended, as implemented in Denmark by Notice L from the Danish Maritime Authority.

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<sup>2</sup> Council Directive 94/25/EC of 16 June 1994 on the approximation of the laws, regulations and administrative provisions of the Member States relating to recreational craft, as amended, as implemented in Denmark by Notice L from the Danish Maritime Authority.

## Vessels with scantlings of or above 20

### Regulation 1 – Survey, approval and registration

- 1 Vessels covered by this annex shall, at the shipowner's request, be reported to the Danish Maritime Authority and be subject to the following surveys:
  - 1) An initial survey before the vessel is put in service.
  - 2) A renewal survey once every 48 months.
  - 3) An intermediate survey within 21-27 months before the date of the next renewal survey.
  - 4) Additional surveys according to the Danish Maritime Authority's assessment in case of major repairs, renewals or where the vessel's use is changed considerably in relation to the shipowner's safety instructions previously in force, cf. section 4.
- 2 The surveys referred to above shall be carried out as follows:
  - 2.1 The initial survey shall be carried out in accordance with Notice F from the Danish Maritime Authority. In addition, the initial survey shall include a control of compliance with the safety instructions of this regulation, including especially whether the shipowner's safety instructions pursuant to section 4 are adequate in relation to the actual navigational activities in consideration of the guidance of annex IV. Furthermore, it shall be controlled whether the shipowner's established navigational restrictions for the vessel follow the principles of indicating trade areas stipulated in Notice F from the Danish Maritime Authority.
  - 2.2 The renewal survey shall include an inspection of the structure, machinery and equipment as stipulated in Notice F from the Danish Maritime Authority in order to ensure that they meet the requirements of the regulation, are in satisfactory order and suitable for the trade for which the vessel is intended. In addition, the inspection shall include a control of compliance with the safety instructions of this regulation. It shall especially be assessed whether the shipowner's safety instructions pursuant to section 4 continue to be adequate in relation to the actual navigational activities and whether they have been drawn up in consideration of the guidance of annex IV and carried out in practice on board the vessel.
  - 2.3 Intermediate surveys shall be carried out by the shipowner as a self-regulatory control by forwarding the shipowner's safety instructions, cf. section 4, to the Danish Maritime Authority with a declaration that the instructions are still adequate, that the structure, equipment and machinery have been controlled and maintained and that the vessel is still fit for the trade for which it is intended.

### Regulation 2 – Certificates and documentation

- 1 A "Permit to carry passengers" shall be issued by the Danish Maritime Authority after a completed initial or renewal survey for a period not exceeding 48 months. After a completed intermediate survey, the date of this survey shall be endorsed by the shipowner. The permit shall contain information about the vessel's trade area, the maximum number of persons permitted on board and the number of passengers as well as the latest date of the next intermediate survey and renewal survey. The validity of the permit shall cease if surveys have not been held within the dates stipulated.
- 2 When a renewal survey is completed within three months before the expiry date, the new permit shall be valid to a date not exceeding 48 months from the date of expiry of the existing permit.
- 3 When a renewal survey is completed more than three months before the expiry date, the new permit shall be valid to a date not exceeding 48 months from the date of completion of the renewal survey.

- 4 When a renewal survey is completed after the date of expiry of the existing permit, the new permit shall be valid to a date not exceeding 48 months from the date of expiry of the existing permit.
- 5 If, at the date of expiry of an existing permit, the Danish Maritime Authority is informed that a vessel is laid up, the new permit shall be valid until a date not exceeding 48 months from the date of the renewal survey.
- 6 The permit shall be issued in duplicate, and one of them shall be located in a place on board that is conspicuous to the passengers, while the other shall be kept together with the shipowner's safety instructions that shall be accessible to the vessel's master in connection with the use of the vessel.
- 7 No vessel shall be engaged in service with passengers without the permit mentioned in subsection 1 or outside the trade area mentioned in the permit or with more passengers than mentioned therein.

### **Regulation 3 – Construction**

- 1 The vessel shall be constructed in accordance with Notice F from the Danish Maritime Authority.
- 2 In this connection, the vessel shall, irrespective of its size and age, meet the requirements for commercial vessels with a length L of or above 12 metres constructed on or after 1 January 2007.

### **Regulation 4 – Stability**

- 1 For vessels where there is no requirement for approved stability information, the vessel's heel shall not be greater than 10 degrees when a weight corresponding to the greatest number of persons that the vessel is permitted to carry is placed as far in the side as possible. The weight corresponding to a person shall be established as 75 kg.
- 2 Vessels arranged for "all sails set" shall be especially assessed by the Danish Maritime Authority.

### **Regulation 5 – Freeboard conditions**

- 1 Decked vessels shall have a freeboard that is at least 5% of the vessel's breadth, however never smaller than 0.20 metres, or the minimum freeboard determined by the stability information. For vessels with trade areas in Greenland, the freeboard shall be at least 0.30 metres.

### **Regulation 6 – Fire protection, fire detection and fire-fighting**

- 1 Outboard motors using petrol shall be fitted with a suitable fire-extinguishing system.

### **Regulation 7 – Accommodation areas and accommodation spaces for passengers**

- 1 The accommodation on vessels regularly carrying overnight passengers on voyages during the night shall be fitted with berths for all those on board.
- 2 There shall be a toilet with a washbasin.
- 3 The seats and floor area in the accommodation shall be reasonable in consideration of the passengers' normal clothes and need for bringing along luggage, etc.

### **Regulation 8 – Equipment**

- 1 For everybody on board, a life-jacket of an approved type with an approved light shall be available. In addition, unless these life-jackets can also be used by children or special conditions apply, life-jackets suitable for children shall be available in a number corresponding to 10% of the greatest number of passengers permitted. The number of life-jackets suitable for children shall, however, never be lower than the actual number of children on board.

### **Regulation 9 – Radio equipment**

- 1 Vessels shall as a minimum be fitted with an approved VHF-DSC radio system as well as an AIS-SART.

### **Regulation 10 – Special requirements for fast-going vessels**

- 1 When drawing up the safety instructions, cf. section 4, a special assessment of the presence of the following risk factors shall be included for fast-going vessels (RIBs, speedboats, etc.) as well as a description of the measures taken to reduce these:
  - 1.1 Protection of those on board against the effect of acceleration and braking forces.
  - 1.2 Prevention of back injuries and the like in connection with heavy effects during navigation in waves.
  - 1.3 Presence of personal protective aids for preventing falls over board or injury as a consequence of falls or blows.
  - 1.4 Prevention against being exposed to hypothermia as a consequence of the effects of the wind and sea.
  - 1.5 The effect of high speed on an increased risk of collision or grounding.

### **Regulation 11 – Special requirements for navigation in Greenland waters**

- 1 When drawing up the safety instructions, cf. section 4, a special assessment of the presence of the following risk factors shall be included for vessels with their trade areas in Greenland waters as well as a description of the measures taken to reduce these:
  - 1.1 Reduced geographical coverage by using means of communication such as mobile telephones, VHF/MF and other means of communication and emergency signalling.
  - 1.2 Reduced possibility of assistance reaching the place of the accident.
  - 1.3 Quickly changing weather conditions.
  - 1.4 Special risk of hypothermia as a consequence of low water and air temperatures.
  - 1.5 Special risks associated with voyages in icy waters.
- 2 Vessels with their trade areas in Greenland waters shall be fitted with a float-free 406 MHz EPIRB (emergency position indicating radio beacon), a VHF radio system as well as a MF-DSC radio system.
- 3 Vessels with their trade areas in Greenland waters shall be fitted with tents and sleeping bags as well as an insulated approved immersion suit complying with the requirements of chapter II, regulation 2.4 of the LSA Code for everyone on board.

### **Regulation 12 – Equivalents**

- 1 Vessels covered by this regulation may, instead of what is contained in regulations 3-9, be constructed or equipped in another way or according to other standards if it is demonstrated in the shipowner's safety instructions that measures have been taken that provide an equivalent safety level. However, this requires that the vessel is suitable for the use for which it is intended.

## Vessels used for professional training in navigation

### Regulation 1 – Survey, approval and registration

- 1 The Danish Maritime Authority's control of the vessel may include compliance with the safety provisions of the regulation, especially whether the shipowner's safety instructions pursuant to section 4 are adequate in relation to the actual navigational activities, have been drawn up in consideration of the guidance of annex IV and have been carried out in practice on board the vessel.

### Regulation 2 – Documentation

- 1 The shipowner shall document the training period by means of teaching plans, course material and a description of the final test.

### Regulation 3 – Construction

- 1 The vessel shall be constructed so that is fit for the use given in the shipowner's safety instructions in terms of strength, buoyancy, stability and the ability to resist weather and the sea.
- 2 The vessel shall meet the requirements and guidelines that may have been issued by the organisation behind the test that it is the intention to be able to pass after having completed the teaching.

### Regulation 4 – Fire protection

- 1 Where there is a risk of fire arising on board, the necessary measures shall have been taken to counter this.
- 2 Measures shall have been taken against the spread of fire, suitable fire-extinguishing means shall be available or procedures shall have been established so as to avoid a risk to those on board in case of a fire.

### Regulation 5 – Equipment

- 1 Where it has been considered relevant according to the shipowner's safety instructions and the risk factors assessed herein, the vessel shall be arranged and equipped with means for:
  - 1.1 Retrieval from the water of persons who have fallen over board.
  - 1.2 Discharge.
  - 1.3 First-aid treatment.
  - 1.4 Anchoring and mooring.
  - 1.5 Emergency propulsion.
  - 1.6 Navigation.
  - 1.7 Communication with other vessels or the shore.
  - 1.8 To attract attention with a view to being assisted in emergencies.
  - 1.9 Thermal protection of the crew and passengers.
  - 1.10 Spare parts and tools.
  - 1.11 Additional equipment for ensuring the health and safety of those on board.
  - 1.12 Prevention of pollution of the marine environment.
  - 1.13 Deck shelter or other protection against the weather.
  - 1.14 Shielding of propellers, motors, rotating parts and hot surfaces.
  - 1.15 Instruction in the operation of equipment, motors and the vessel in general.

- 2 The vessel shall be fitted with light, sound and signalling equipment in accordance with the current version of the international regulations for preventing collision at sea and local navigational regulations.
- 2.1 The vessel shall be equipped with CE-marked life-jackets for all those on board that fit all those on board in terms of buoyancy and size.
- 2.2 Life-jackets used in combination with immersion suits shall have a buoyancy of at least 275 Newton.
- 2.3 On the condition that the persons on board can swim and that there is an immediate possibility of being retrieved from the water by an accompanying vessel nearby, the required life-jackets may be replaced by CE-marked buoyancy aids provided that they are fitted with reflexes.
- 2.4 Where buoyancy aids are being used, cf. 3.1, persons shall wear supplementary clothing in signalling colours to increase the visibility when lying in the water. If the buoyancy aids are made of signalling colours, the requirement for supplementary clothing shall be considered met.
- 2.5 The vessel shall be equipped with one or more approved SOLAS liferafts or approved four-person liferafts capable of retrieving all those on board or other measures shall have been taken to ensure a similar safety level.

#### **Regulation 6 – Special requirements for fast-going vessels**

- 1 When drawing up the safety instructions, cf. section 4, a special assessment of the presence of the following risk factors shall be included for fast-going vessels (RIBs, speedboats, etc.) as well as a description of the measures taken to reduce these:
  - 1.1 Protection of those on board against the effect of acceleration and braking forces.
  - 1.2 Prevention of back injuries and the like in connection with heavy effects during navigation in waves.
  - 1.3 Presence of personal protective aids for preventing falls over board or injury as a consequence of falls or blows.
  - 1.4 Prevention against being exposed to hypothermia as a consequence of the effects of the wind and sea.
  - 1.5 The effect of high speed on an increased risk of collision or grounding.

#### **Regulation 7 – Special requirements for navigation in Greenland waters**

- 1 When drawing up the safety instructions, cf. section 4, a special assessment of the presence of the following risk factors shall be included for vessels with their trade areas in Greenland waters as well as a description of the measures taken to reduce these:
  - 1.1 Reduced geographical coverage by using means of communication such as mobile telephones, VHF/MF and other means of communication and emergency signalling.
  - 1.2 Reduced possibility of assistance reaching the place of the accident.
  - 1.3 Quickly changing weather conditions.
  - 1.4 Special risk of hypothermia as a consequence of low water and air temperatures.
  - 1.5 Special risks associated with voyages in icy waters.

#### **Regulation 8 – Use of CE-marked vessels**

- 1 Vessels that are CE-marked and comply with the recreational craft directive<sup>3</sup> shall be considered to meet the requirements for the vessel's design and construction following from regulations 3 and 4. Council Directive 94/25/EC of 16 June 1994 on the approximation of the laws, regulations and admin-

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<sup>3</sup> Council Directive 94/25/EC of 16 June 1994 on the approximation of the laws, regulations and administrative provisions of the Member States relating to recreational craft, as amended, as implemented in Denmark by Notice L from the Danish Maritime Authority.

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## Guidelines for drawing up safety instructions

### Purpose

The shipowner shall develop safety instructions for safe navigation by the vessel(s) that the shipowner uses for the navigational activities. The purpose hereof is that the shipowner:

- 1) identifies himself as the one who has the overall responsibility for the navigational activities,
- 2) establishes the navigational activities concerned,
- 3) identifies the risks associated with the navigational activities,
- 4) take technical and operational measures that effectively counter the risks,
- 5) ensures that the vessel(s) is suitable and fitted with the necessary equipment,
- 6) ensures that the crew is sufficient and competent,
- 7) describes the operational measures to be observed by the crew and the passengers,
- 8) ensures that it is possible to save everyone in case of an accident,
- 9) ensures the calling of assistance in case of an accident,
- 10) ensures that information about the number of persons on board is known and kept ashore and is easily accessible in case of a rescue operation,
- 11) ensures that safety instructions are always given to new persons on board before initiating the voyage,
- 12) ensures the collection of experience with a view to improving safety on an ongoing basis.

### Who draws up the safety instructions?

It is the shipowner's responsibility that the safety instructions are drawn up by persons with maritime competences covering the specific navigational activities.

### Form

The safety instructions should be brief and easy to read to all users, i.e. the master, the crew and the passengers.

### Contents

The safety instructions shall contain the following:

#### 1) Identification of the shipowner and his legally responsible person

"The shipowner" is the person or the body that has ownership of the navigational activities. Consequently, the shipowner is responsible for the choice of navigational activities as well as for how they are planned and carried out. The shipowner may be the owner of the vessel, but does not need to be so. The voyages may very well be carried out in hired or borrowed vessels. What is decisive is whether the owner has ownership of the activities.

In the safety instructions, the shipowner's name and address shall be given.

#### 2) Navigational activities

The navigational activities concerned shall briefly be stated as well as where and when they are permitted to take place.

### Examples:

- *Canoeing during the period from [date 1] to [date 2] with school classes on the Mølleåen as well as Furesø, Bagsværd Sø and Lyngby Sø.*
- *Canoeing along the coast in Mariager Fjord with school classes during the period from [date 1] to [date 2].*
- *Speedboat voyages with continuation school students following the water sports line in the Storstrømmen between the Storstrømsbroen and the Farøbroerne in favourable conditions of weather and temperature (water temperatures min. X° C, air temperatures min. Y° C as well as max. wind speed Z m/s). Recreational navigation, water ski as well as training with a view to acquiring a certificate of proficiency.*
- *Event and teambuilding voyages during the period from [date 1] to [date 2] with a 42' sailboat from Grenå along the east coast of Jutland as well as voyages to Anholt in the following conditions of weather and temperature: [water and air temperature, wind speed, wave height, etc.].*
- *Recreational navigation in the Sound with 30' motorboat, [date 1] to [date 2], and in the following conditions of weather and temperature: [water and air temperature, wind speed, wave height, etc.].*
- *Dinghy voyages in the waters immediately off Havnekøbing, all year round at max. wind speed X m/s.*
- *Transportation of servicemen, etc. from Havnekøbing to wind turbine installations offshore, all year round, however only in the following conditions of weather and temperature: [water and air temperature, wind speed, wave height, etc.].*
- *Recreational navigation with max six passengers in the Godthåbsfjorden between Nuuk and Nordlandet in a 37' motorboat, [date 1] to [date 2], only in favourable weather conditions.*
- *Occasional passenger transportation by a 12-metre fishing vessel from a harbour village to Qaqortoq, max. four passengers, in favourable weather conditions.*

### **3) Identification of risks**

The safety risks related to navigation vary considerably depending on the navigational activities and the circumstances.

It shall be the responsibility of the shipowner that the specific navigational activities are carefully examined in the specific circumstances with a view to identifying any considerable risks before the start of the navigational activities. All considerable risks identified shall be listed in the safety instructions. If/when additional considerable risks are identified on an ongoing basis, they shall be added to the list as soon as they are identified.

Examples of considerable risks in connection with various navigational activities are listed in table 1.

When carrying children and young persons, the following risks shall be especially considered:

- Do those on board know how to swim?
- Have the parents/guardians consented to the voyage?

When navigating fast-going vessels, the following risks shall be especially considered:

- Collision/grounding (increased risks as a consequence of high speed).
- Protection of those on board against the effect of acceleration and braking forces.
- Prevention of back injuries and the like in connection with heavy effects during navigation in waves.
- Presence of personal protective aids for preventing falls over board or injury as a consequence of falls or blows.

- Prevention against being exposed to hypothermia as a consequence of the effects of the wind and sea.

When navigating Greenland waters, the following risks shall be especially considered:

- Reduced geographical coverage by using means of communication such as mobile telephones, VHF/MF and other means of communication and emergency signalling.
- Reduced possibility of assistance reaching the place of the accident.
- Quickly changing weather conditions.
- Special risk of hypothermia as a consequence of low water and air temperatures.
- Special risks associated with voyages in icy waters.

#### **4) Measures to counter risks**

For each of the considerable risks identified, the shipowner shall ensure that measures are taken that will counter the risk effectively. They may be technical measures (the vessel's construction and equipment) and/or operational measures (restrictions in use, etc.).

**Examples** of considerable risks in connection with a number of navigational activities and measures to counter these are shown in table 1.

The examples merely illustrate the systematics behind the drawing up of the safety instructions. The risks and measures have not been described exhaustively for the navigational activities chosen. In all the examples, there will in reality be far more considerable risks than those shown. It is the shipowner's responsibility that all the considerable risks are identified in connection with the specific activities and to decide on what measures are necessary to counter them. All risks and measures should be described exhaustively so that the shipowner's considerations are reflected in the safety instructions.

**Table 1: Examples of risks and measures in connection with various navigational activities**

Navigational activity	Risks	Measures
Canoeing during the period from [date 1] to [date 2] with school classes on the Mølleåen as well as Furesø, Bagsværd Sø and Lyngby Sø.	Hypothermia during voyages. Falling over board. Capsizing (especially when crossing large lakes). Risk of drifting away from the shore (in case of currents, offshore wind). Etc.	Warm clothing/cancellation – establishing criteria for this. Use of life-jacket. Establish requirements for the properties of the life-jackets. Navigational procedures for crossing lakes (for example by following the shore with onshore wind rather than crossing the lake). Etc.
Speedboat voyages with continuation school students in the Storstrømmen between the Storstrømsbroen and the Farøbroerne during the period from [date 1] to [date 2] in the following conditions of weather and temperature (water temperatures min. X° C, air temperature min. Y° C as well as max. wind speed Z m/s). Recreational navigation, water ski as well as training with a view to acquiring a certificate of proficiency.	Falling over board. Flooding (wind, head sea). Capsizing (especially in waves). Engine fire. Collision and grounding (high speed). Risks of water skiing. Etc.	Use of life-jacket. Establish requirements for the properties of the life-jackets. Reduced speed, changing the course, cancelling the voyage. Cancelling the voyage at expected wave heights > xx m and wind speed > xx m/s. Fixed fire-extinguishing system for engines. Establishing procedures for navigation at high speed. Procedures for navigation in connection with water skiing. Etc.
Event and teambuilding voyages during the period from [date 1] to [date 2] with a 42' sailboat from Grenå along the east coast of Jutland as well as voyages to Anholt in the following conditions of weather and temperature: (water temperature min. X° C, air temperature min. Y° C and max. wind speed Z m/s).	Capsizing (navigation in heavy weather, spinnaker navigation). Collision (especially at trafficked channels). Grounding (especially in connection with navigation during the night). Fire (engine room, pantry). Water ingress through seawater intakes. Rescue in case of loss. Etc.	Weather criteria, incl. in connection with the use of spinnakers. Navigational planning, especially vigilance. Navigation during the night only in open waters, special vigilance. Fixed fire-extinguishing system in engine rooms, portable extinguisher and fire blanket in pantry. Maintenance of sea valves. Liferaft, calling assistance (radio installation, VHF-DSC). Etc.
Dinghy voyages in the waters off Havnekøbing, all year round.	Flooding, capsizing (especially in connection with navigation in heavy weather). Hypothermia in cold air (especially during the winter).	Training in capsizing and righting. Ensuring immediate assistance from an accompanying boat. Insulating clothing.

	Hypothermia in cold water (especially during the winter). Etc.	Dry suit/wet suit. Etc.
Passenger transportation from Havnekøbing to wind turbine installations offshore.	Call offshore. Transfer of persons offshore. Offshore navigation in heavy weather. Engine room fire. Rescue in case of loss. Hypothermia in cold water (especially during the winter). Etc.	Requirements for the vessel's manoeuvrability, weather criteria, procedures for calls. Weather criteria, procedure for transfer of persons, thermal protection. Requirements for the vessel's seaworthiness. Weather criteria. Fixed fire-extinguishing system. Liferafts, assistance from ashore. Thermal protection. Etc.
Recreational navigation with max six passengers in the Godthåbsfjorden between Nuuk and Nordlandet in a 37' motorboat, [date 1] to [date 2], and in the following conditions of weather and temperature (water temperature min. X° C, air temperature Y° C as well as max. wind speed Z m/s).	Engine fire. Engine stop. Grounding. Collision. Fast change of weather with strong wind and sea. Rescue in case of loss. Cold. Etc.	Installation of fixed fire-extinguishing system in engine room. Anchoring, assistance from ashore. Navigational planning, special vigilance. Special vigilance. Navigational planning, possibility of seeking shelter. Liferaft, calling assistance (radio installations, VHF-DSC). Thermal protection, immersion suits. Etc.
Occasional passenger transportation by a 12-metre fishing vessel from a harbour village to Havneby, max. four passengers, in the following conditions of weather and temperature (water temperature min. X° C, air temperature Y° C as well as max. wind speed Z m/s).	In principle, as in the above example. In addition, the following can be mentioned: Impaired possibility of calling assistance when navigating areas with lacking radio coverage (VHF/medium wave). Risks associated with passengers on fishing vessels (gear, room, etc.)	Measures as mentioned above. Examine the possibility that iridium telephony may function in combination with other measures as an alternative to VHF-DSC. Measures limiting the passengers' access to areas with fishing gear as well as the securing of room for all the passengers on board in accommodation spaces.

## 5) Description of the vessel and equipment

The shipowner shall ensure that the vessels are suitable for the specific navigational activities and that they are fitted with the necessary equipment for countering the considerable risks.

The vessel, its technical specifications and the equipment that shall be available on board shall be listed. It shall be clearly stated according to which standards the vessel is built and for which use it is intended according to the construction standard or the manufacturer's instructions.

### Example

*Recreational craft, CE-marked according to the recreational craft directive, intended for navigation in sea area B: Offshore vessels: Constructed for offshore navigation, max. wind speed 8, significant wave height max. 4 metres, max six persons on board.*

[The technical specifications of the boat and the list of equipment are annexed.]

It is the responsibility of the shipowner that the vessel and the equipment are at any time maintained and that it is described how this is ensured. This may for example be through the use of checklists of equipment, periodic inspection of the vessel and equipment or control before voyages.

In addition, it is the responsibility of the shipowner that requirements are stipulated for the passengers/students' behaviour, obligations and competences. For example, it may be a requirement that the students know how to swim, that they have previous competences before taking part in kayaking activities.

## 6) The crew and its competences

On the basis of the navigational activities, the considerable risks, the measures chosen and the type of vessel, the shipowner shall be obliged to ensure that the vessel's crew is sufficient in number and competent to navigate the vessel safely.

The requirements for the crew competences will vary in accordance with the specific navigational activities and vessels. Other things being equal, the requirements will increase the larger the vessels and the greater the risks.

For vessels with scantlings of or above 20, minimum requirements are stipulated in the regulation.

For vessels with scantlings below 20, the shipowner shall be obliged to ensure that the necessary competences and the necessary crew are available and that this is documented in the safety instructions.

### Example

*Canoeing with continuation school students on lakes and rivers during the summer.*

*The vessels are small and easy to operate and the risks are limited. The shipowner assesses that there shall be at least one teacher per X children and that all the teachers shall have experience with canoeing. At least one teacher shall have passed a relevant course in canoeing and safety. In order to counter the risks associated with capsizing and falls over board, all the teachers shall be able to swim X metres and be capable of rescuing one unconscious person X metres, provide first aid, operate communication equipment, etc.*

If it shall also be possible to carry out canoeing voyages along coasts, the risks are increased. The shipowner shall take account of this, which can for example involve increasing the requirements for the teachers' competences.

#### Example

Dinghy voyages with pupils – one-man dinghies, teachers in accompanying boats.

The shipowner shall be responsible for ensuring that the teachers are competent for navigating accompanying boats. In this connection, the courses offered by the Danish Sailing Association, licenses for speedboats or certificates of proficiency may be relevant training.

Furthermore, the shipowner of such vessels should consider whether there is a need for other competences. For example, knowledge of navigation in connection with water skiing, navigation with fast-going vessels, navigation in icy waters or other characteristics of the navigational activity carried out.

#### **7) Operational measures to be observed by the crew and passengers**

If the shipowner has identified any risks that are countered by operational restrictions, they shall be stated in the safety instructions. They may, for example, have the form of geographical restrictions to the use, the time of the year and the time of day during which the voyages can take place as well as any restrictions to the number of persons on board.

#### **8) Measures ensuring that everyone can be rescued in case of an accident**

The shipowner shall be responsible for ensuring that account is taken of the safety in case of the worst possible accident, i.e. in cases where those on board have to desert the vessel due to loss, capsizing, fire or the like.

It shall be ensured that measures have been taken to rescue everyone on board even if the vessel is lost. This may be countered in a number of ways:

- Possibility of being rescued by means of a liferaft and thermal protection.
- Possibility of being rescued by means of an accompanying boat (navigation in pairs).
- A stand-by emergency preparedness may be established ashore that may come to the rescue.
- Etc.

The list is not exhaustive, and it shall be stressed that there is freedom in the choice of method. What is decisive is that the shipowner has ensured beforehand that all the worst possible scenarios have been considered and that measures have been established to effectively ensure in these cases that everyone is rescued and kept alive until assistance gets there.

The shipowner shall ensure that these situations are described together with effective measures.

#### **9) Measures ensuring that it is always possible to call for assistance in case of accidents**

In case of an accident, it is decisive that it is possible to call for assistance and that it can be spread out as fast as possible. Depending on the area, the traffic density, the weather conditions and the distance to the shore, it should be considered what means would be effective for calling assistance. Examples hereof may be by means of radio equipment, mobile or iridium telephony, previous information about the available assistance

in the area or navigation in pairs. Furthermore, indirect means should be available, such as distress signal rockets, fog horns or other means of signalling.

**10) Measures ensuring that information about the number of persons on board is known and kept ashore and is easily accessible in case of a rescue operation**

Before the voyage, it should be ensured that persons who do not take part in the voyage as such are informed about the planned duration of the voyage, the number of persons on board as well as the planned route. Furthermore, fixed agreements about the times of contact should be available and about alarming if persons ashore realize that the voyage deviates from what has been agreed without any report about any changes having been made.

**11) Measures ensuring that safety instructions are always given to new persons on board before the start of the voyage**

Special account should be taken of the fact that there may be persons on board who cannot be presupposed to have any previous navigational or maritime safety related experience. Consequently, it is of the utmost importance that all persons are, before the voyage is initiated, informed about, for example, the use of life-saving appliances, how the planned voyage is expected to be, and what should be done in an emergency.

**12) Measures describing how it is ensured that a follow-up is made on unintended incidents or accidents**

It is essential to the shipowner's work with safety that a follow-up is continuously made on unintended incidents, accidents and other conditions related to safety on board. Consequently, the shipowner shall in the safety instructions indicate how a follow-up is made on these conditions.