

Translation: Only the Danish document has legal validity.

*Order no. 1824 of 7 December 2020 issued by  
the Danish Maritime Authority*

## **Order on the issue of pilot certificates and pilotage exemption certificates<sup>1)</sup>**

In pursuance of section 8(3), section 12(2), section 14(3), section 24(7) and section 34(4) of the Danish Pilotage Act (*lodsloven*), see Consolidated Act no. 352 of 12 April 2016, the following provisions are laid down:

### Part 1

#### *Definitions*

**Section 1.** For the purposes of this Order, the following definitions apply:

- (i) Deep-sea pilot certificate: A pilot certificate for deep-sea pilotage issued by an authority competent to do so according to a recommendation from the United Nations' International Maritime Organisation (IMO).
- (ii) Deep-sea pilotage: Pilotage outside the territorial waters of a country.
- (iii) Pilot: A person certified by the Danish Maritime Authority to carry out pilotage activities.
- (iv) Pilot certificate: A certificate issued by the Danish Maritime Authority certifying that the holder is authorised to carry out pilotage activities as specified.
- (v) Pilotage exemption certificate: A certificate issued by the Danish Maritime Authority exempting a ship from the obligation to take a pilot if the holder of the pilotage exemption certificate navigates the ship and if the pilotage exemption certificate covers the type and conditions of the ship and the waters that the ship navigates.
- (vi) Pilotage: Advice given to the ship's master about navigation, sailing and manoeuvring irrespective of whether the advice is provided on board the ship or by means of communication from another ship or from ashore.
- (vii) Pilotage area: The geographical area in which a pilot is authorised to carry out pilotage activities according to his or her pilot certificate.
- (viii) Pilot trainee: A person acknowledged by the Danish Maritime Authority to be undergoing training to become a pilot.

(ix) Pilot trainee ID card: A certificate issued by the Danish Maritime Authority certifying that the holder is undergoing training to become a pilot and is entitled to participate in peer-to-peer training.

## Part 2

### *Pilot certificate*

**Section 2.** A pilot certificate is issued by the Danish Maritime Authority upon application if the applicant:

- (i) is trained at a level permitting the applicant to navigate ships irrespective of their size;
- (ii) holds a certificate of competency as master;
- (iii) has at least two years' experience as a master or a chief mate from relevant shipping operations;
- (iv) can document sufficient knowledge of electronic charts (ECDIS);
- (v) holds a valid health certificate without restrictions, but see subsection (4);
- (vi) has completed a pilotage training programme, see Part 3;
- (vii) has completed peer-to-peer training, see Part 4;
- (viii) has special knowledge and experience of the geographical pilotage area applied for, see Part 5;
- (ix) has passed a defined theoretical and practical aptitude test, see Part 6;
- (x) is associated with a pilotage service provider registered in accordance with section 24(4) of the Danish Pilotage Act; and
- (xi) does not have any considerable overdue debt due to public authorities, defined as amounts of or above DKK 50,000.

*Subsection 2.* In special circumstances, the Danish Maritime Authority may grant an exemption from the rules of subsection (1)(i) and (ii). However, a pilot certificate must never be issued for the piloting of ships which the pilot is not trained to navigate.

*Subsection 3.* The pilot certificate may be restricted to specific ship sizes. The Danish Maritime Authority shall lay down detailed requirements in this respect, see Annex 3.

*Subsection 4.* If a health certificate pursuant to subsection (1)(v) has restrictions, the Danish Maritime Authority may request further information for purposes of assessing whether the applicant is able to discharge the duties of a pilot.

**Section 3.** The Danish Maritime Authority shall decide on the issue of a pilot certificate within 14 days of receipt of the application and all required documents, but see subsection (2).

*Subsection 2.* The time-limit set out in subsection (1) may be extended once by one month if so warranted by the complexity of the case. The Danish Maritime Authority shall state the reasons for and the duration of the extension and notify the applicant thereof before the expiry of the time-limit set out in subsection (1).

*Subsection 3.* Applicants may not carry out pilotage activities or act as a pilot until they have been issued with a pilot certificate from the Danish Maritime Authority.

*Subsection 4.* When the Danish Maritime Authority receives an application for a pilot certificate, a receipt will be sent to the applicant stating the processing time, see subsection (1), and that the applicant should not consider the permission to act as a pilot to have been granted until the pilot certificate has been issued, see subsection (3), and stating the complaints procedure.

**Section 4.** The pilot certificate is designed and issued in accordance with the provisions set out in Annex 1.

*Subsection 2.* The photo on the electronic pilot certificate must be renewed every five years.

*Subsection 3.* If the holder of a pilot certificate ceases to satisfy the conditions set out in this Order, he or she shall promptly notify the Danish Maritime Authority thereof.

**Section 5.** If a pilot deems that it is no longer possible to maintain the required local experience, see Annex 3, the pilot may gain the experience by participating in peer-to-peer training in the certified pilotage area before expiry of the period.

**Section 6.** A holder of a deep-sea pilot certificate issued by an authority competent to do so pursuant to and in accordance with IMO Recommendation on the use of adequately qualified deep-sea pilots in the Baltic Sea may have it exchanged for a Danish deep-sea pilot certificate if the holder is associated with a Danish pilotage service provider and hands in his or her foreign deep-sea pilotage certificate.

*Subsection 2.* The photo on the electronic deep-sea pilot certificate must be renewed every five years.

*Subsection 3.* The Danish deep-sea pilot certificate must be issued with the same pilotage area and the same restrictions as the foreign deep-sea pilot certificate.

### Part 3

#### *Pilot training requirements*

**Section 7.** The training referred to in section 2(1)(vi) comprises:

- (i) Bridge Resource Management and Emergency Training courses for pilots to be completed at least every five years;
- (ii) Ship handling for pilots, to be completed at least every five years;
- (iii) Pilotage law course for pilots, to be completed at least every five years; and
- (iv) Personal safety course for pilots, to be completed at least every three years.

*Subsection 2.* The requirements for the content of the above-mentioned courses are described in Annex 2.

**Section 8.** A pilot certificate is only valid for:

- (i) Ship-to-Ship (STS) transfer operations if the pilot has completed an STS course for pilots, and
- (ii) piloting of tugboats or ships that use tugboats, in dredged channels or buoyed fairways leading to ports and within ports if the pilot has completed a tug handling course for pilots.

*Subsection 2.* The requirements for the content of the above-mentioned courses are described in Annex 2.

*Subsection 3.* The above-mentioned courses must be completed at least every five years.

## Part 4

### *Peer-to-peer training*

**Section 9.** The Danish Maritime Authority shall issue a pilot trainee ID card upon application if the pilot trainee satisfies the provisions of section 2(1)(i), (ii) and (v).

*Subsection 2.* The pilot trainee ID card is designed and issued in accordance with the provisions set out in Annex 1.

**Section 10.** The pilot trainee shall complete peer-to-peer training the required number of times for each pilotage area applied for, see Annex 3. The peer-to-peer training must be provided by a certified pilot.

*Subsection 2.* The pilot trainee or the pilot may contact a pilotage service provider, which will then designate a pilotage assignment known at the time in the pilotage area in which peer-to-peer training is requested.

*Subsection 3.* A pilotage service provider is under a duty to take on pilot trainees and provide peer-to-peer training. The pilot trainee or the pilot receiving peer-to-peer training shall pay any expenses related to the peer-to-peer training, including any documented expenses directly related to the peer-to-peer training with the vessel or pilotage service provider providing the peer-to-peer training.

## Part 5

### *Requirements for the individual pilotage areas*

**Section 11.** The requirements for the individual pilotage areas are set out in Annex 3.

*Subsection 2.* Applicants and holders of a pilot certificate shall submit documentation electronically to the Danish Maritime Authority proving that the requirements for sailing frequency for the individual pilotage area, see Annex 3, have been met.

**Section 12.** The Danish Maritime Authority may grant exemptions from the requirements for sailing frequency set out in Annex 3 where exceptional conditions prevail.

## Part 6

### *Aptitude test for obtaining a pilot certificate*

**Section 13.** The practical part of the aptitude test consists of completion of a pilotage assignment in a pilotage area applied for.

*Subsection 2.* The theoretical part of the aptitude test consists of a test lasting about four hours in which the applicant is examined in the local knowledge of each pilotage area applied for, see Annex 4.

*Subsection 3.* The aptitude test is attended by a pilot who has participated in peer-to-peer training and an examiner appointed by the Danish Maritime Authority.

*Subsection 4.* The applicant shall pay any expenses related to the holding of the aptitude test, including preparation, hourly pay and travel expenses, etc.

## Part 7

### *Aptitude test for obtaining a pilotage exemption certificate*

**Section 14.** Pilotage exemption certificates are issued upon application if the applicant:

(i) can document having fulfilled the requirement for sailing frequency in the pilotage area applied for, see Annex 3; and

(ii) has passed a theoretical aptitude test, see Annex 4.

*Subsection 2.* In connection with the acquisition of a pilotage exemption certificate, the Danish Maritime Authority may decide that a pilot need not be taken in connection with fulfilment of the sailing frequency requirement under subsection (1)(i).

*Subsection 3.* The aptitude test is a test lasting about one to two hours in which the applicant is examined in the local knowledge of each pilotage area applied for.

*Subsection 4.* The aptitude test is attended by an examiner and an external examiner appointed by the Danish Maritime Authority.

*Subsection 5.* The applicant shall pay any expenses related to the holding of the aptitude test, including preparation, hourly pay and travel expenses, etc.

*Subsection 6.* Navigators of towed ships requesting pilotage exemption in connection with towage are subject to section 15.

**Section 15.** A pilotage exemption certificate for navigators of ships that are towed to or from a quay will be issued upon application if the applicant:

- (i) can document having completed a tug handling course, see Annex 2;
- (ii) can document having fulfilled the current requirements for sailing frequency in the specific area for which a pilotage exemption certificate is requested, see Annex 3; and
- (iii) has passed a theoretical aptitude test, see Annex 4.

*Subsection 2.* The aptitude test consists of a test lasting about one hour in which the applicant is examined in towage.

*Subsection 3.* The aptitude test is attended by an examiner and an external examiner appointed by the Danish Maritime Authority.

*Subsection 4.* The applicant shall pay any expenses related to the holding of the aptitude test, including preparation, hourly pay and travel expenses, etc.

**Section 16.** The pilot certificate is designed and issued in accordance with the provisions set out in Annex 1.

*Subsection 2.* Applicants and holders of a pilotage exemption certificate shall submit documentation electronically to the Danish Maritime Authority proving that the requirements for sailing frequency for the individual pilotage area have been met.

*Subsection 3.* The photo on the electronic pilotage exemption certificate must be renewed every five years.

*Subsection 4.* If the holder of a pilotage exemption certificate ceases to satisfy the conditions set out in this Order, he or she shall promptly notify the Danish Maritime Authority thereof.

**Section 17.** Holders of a pilotage exemption certificate shall notify the port concerned that they are in possession of a valid pilotage exemption certificate.

## Part 8

### *Recognition of professional qualifications*

**Section 18.** Directive 2005/36/EC of the European Parliament and of the Council on the recognition of professional qualifications applies in connection with the processing of cases under this Order. An applicant may be issued with a certificate authorising the applicant to carry out pilotage activities if the applicant can substantiate having professional qualifications that can be recognised under the rules of the Directive and if the applicant otherwise satisfies the conditions set out in the Danish Pilotage Act and this Order. This applies to temporary and occasional pilotage activities as well as in the event of establishment.

*Subsection 2.* The application must be submitted to the Danish Maritime Authority through *Kvikskranken* (quick service desk).

*Subsection 3.* The application must include the following information:

- (i) applicant's full name;
- (ii) applicant's contact details, home address, including telephone number and e-mail address;
- (iii) if a party other than the applicant, for instance a company, submits documents on the applicant's behalf, the name, address, telephone number and e-mail address, if relevant, of the party submitting the documents must be stated.

*Subsection 4.* The application must be accompanied by the following documents:

- (i) documentation of the applicant's nationality;
- (ii) authorisation certificate or other certificate of proficiency authorising the applicant to pursue the profession of pilot in the applicant's home country;
- (iii) documentation of any professional experience, including documentation of the applicant's local knowledge, see Parts 4 and 5, and knowledge of electronic nautical charts;
- (iv) a valid health certificate without restrictions; and
- (v) proof that the applicant does not have any considerable overdue debt due to public authorities, defined as amounts of or above DKK 50,000.

**Section 19.** In the processing of cases about temporary and occasional services, see Article 5(2) of the Directive, the service provider shall, before the first provision of services, submit a written declaration in accordance with Article 7(1) of the Directive, and the declaration must be accompanied by the documents referred to in Article 7(2) of the Directive.

*Subsection 2.* In connection with the declaration, the service provider shall submit the following documents:

- (i) proof of nationality;
- (ii) contact details, including home address, e-mail and telephone number;

(iii) proof that the service provider is legally established in the Member State of establishment and is not prohibited from pursuing the profession of pilot, even temporarily;

(iv) evidence of professional qualifications; and

(v) a valid health certificate without restrictions.

*Subsection 3.* The Danish Maritime Authority shall check the professional qualifications of the service provider as the profession has public health or safety implications. In the case of significant differences between the professional qualifications of the service provider and the professional qualifications required under the Danish Pilotage Act and this Order, including in particular the requirement of local knowledge, and this difference may damage the health or safety of the service recipient, the Danish Maritime Authority may allow the service provider to take an aptitude test to prove that he or she has the required competencies.

**Section 20.** Cases concerning establishment must be treated in accordance with the rules set out in Articles 11-13, 14(1), 14(2), 14(4), 14(5), 14(6), 14(7) and Articles 50-52. Evidence of formal qualifications issued in a third country must be treated in accordance with Article 3(3) of the Directive.

*Subsection 2.* On the conditions set out in Article 14(1), the Danish Maritime Authority may require the applicant to complete an adaptation period of up to three years or to take an aptitude test. The applicant is entitled to choose between an adaptation period and an aptitude test.

*Subsection 3.* The Danish Maritime Authority's requirement of an adaptation period or an aptitude test must be applied with due regard to the principle of proportionality. The applicant's relevant professional experience or life-long learning in a Member State or a third country must also be taken into consideration.

## Part 9

### *Miscellaneous provisions*

**Section 21.** Reporting to the Danish Maritime Authority under this Order must be done electronically through the Danish Maritime Authority's reporting system.

## Part 10

### *Penalty provisions*

**Section 22.** Contravention of section 4(3) and section 16(4) of this Order is punishable with a fine or imprisonment for up to one year.

## Part 11

### *Entry into force*



**Section 23.** This Order enters into force on 1 January 2021.

*Subsection 2.* Order no. 1077 of 21 November 2012 on the issue of pilot certificates and pilotage exemption certificates is repealed.

*Danish Maritime Authority, 7 December 2020*

Jan Thorn  
On behalf of the Director General

/ Kristina Ravn

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Annex 1

Design and content of certificates, ID cards and licences

Design and content of pilot certificates and deep-sea certificates

I. Design of the pilot certificate:

The pilot certificate is designed as illustrated here:

 <b>PILOT CERTIFICATE</b> P- 306	This pilot certificate is issued according to The consolidated pilotage order no. 352 of 12 April 2016
Issued: _-_- Expiry date: _-_-	Issuing authority:
Name: _____	
Born: _-_-	Pilotage Superintendent
Signature: _____	<b>Danish Maritime Authority</b>
Pilotage area(s): _____	Caspar Brands Plads 9, 4220 Korsør, Denmark
(Limitation)	+45 721900 - sfs@dma.dk

II. Content of the pilot certificate:

The pilot certificate is produced in English.

The following is stated on the electronic pilot certificate:

- flag of nationality
- type of certificate
- serial number of certificate
- photo of certificate holder

- issue date
- expiry date
- name of pilot
- pilot's date of birth
- pilotage area(s)
- limitations, e.g. length and draught of ship
- reference to the Danish Pilotage Act
- signature of issuing authority
- name, address, telephone number and e-mail of issuing authority.

### III. Deep-sea pilot certificate:




The deep-sea pilot certificate is designed in accordance with IMO's guidelines.

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### Design and content of the pilot trainee ID card

#### I. Design of the pilot trainee ID card:

The pilot trainee ID card is designed as illustrated here:

 <b>PILOT TRAINEE ID-CARD P - 1003</b>		This pilot certificate is issued according to The consolidated pilotage order no. 352 of 12 April 2016	
Issued: _-_- Expiry date: _-_- Name: Born: _-_- Signature: _____ Pilotage area(s):		Issuing authority:  Pilotage Superintendent  <b>Danish Maritime Authority</b> Caspar Brands Plads 9 , 4220 Korsør, Denmark +45 721900 - sfs@dma.dk	

#### II. Content of the pilot trainee ID card:

The pilot trainee ID card is produced in English.

The following is stated on the electronic pilot trainee ID card:




- flag of nationality

- name of card
- serial number
- photo of card holder
- issue date
- expiry date
- pilot trainee's date of birth
- pilotage area(s)
- reference to the Danish Pilotage Act
- signature of issuing authority
- name, address, telephone number and e-mail of issuing authority.

Design and content of pilotage exemption certificate

#### I. Design of the pilotage exemption certificate:

The pilotage exemption certificate is designed as illustrated here:

 <b>PILOT EXEMPTION CERTIFICATE PEC- 151</b>		This pilot certificate is issued according to The consolidated pilotage order no. 352 of 12 April 2016	
Issued: _-_-    Expiry date: _-_-			
Name:			
Born: _-_-			
Signature: _____			
Area(s):			
Ship IMO no(s):			
		Issuing authority:  Pilotage Superintendent	
		<b>Danish Maritime Authority</b> Caspar Brands Plads 9 , 4220 Korsør, Denmark +45 721900 - sfs@dma.dk	

#### II. Content of the pilotage exemption certificate:

The pilotage exemption certificate is produced in English.

The following is stated on the electronic pilotage exemption certificate:

- flag of nationality
- type of certificate
- serial number of certificate

- photo of certificate holder
  - issue date
  - expiry date
  - name of certificate holder
  - date of birth of certificate holder
  - area(s)
  - IMO number
  - reference to the Danish Pilotage Act
  - signature of issuing authority
  - name, address, telephone number and e-mail of issuing authority.
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## Annex 2

### Training requirements

#### Bridge Resource Management and Emergency Training course for pilots

The purpose of the course is:

to train pilots in the correct exchange of information between pilot and ship's master before and during pilotage, including:

- Pilot Card
- passage planning, including emergency procedures
- information about mooring, types of tugboats, use of tugboats
- exchange of special information, current, tide and traffic conditions
- unusual ship handling characteristics, crew limitations, technical errors and deficiencies
- confirmation of which languages are used for internal and external communication
- safe and correct communication with the ship's master and the bridge watchkeeping personnel

- safe and efficient allocation of duties on the bridge, both during piloting and in an emergency situation

- ensuring the efficient exchange of information

to provide pilots with knowledge and understanding of:

- the significance of people's mental strengths and limitations

- the significance of language barriers

- the significance of cultural barriers

- techniques for dealing with the above-mentioned issues.

The course includes the following subjects:

Communication

- rules of good communication

- limitations and strengths in verbal communication

- context and perspective.

Briefing

- shared situational awareness.

People's physical and psychological limitations and strengths, including

- perception

- interpretation and situational awareness

- memory

- fatigue, stress and workload.

The relationship between crew and pilot

- cultural differences

- expectations

- management, the group and the individual.

Case studies

Simulator training in full mission simulator, including planning, briefing, communication and teamwork.

Emergency training and crisis control with the aid of simulator exercises, including:

- loss of steering
- loss of main engine, etc.
- radar faults
- loss of vital systems, such as Gyro and ECDIS – blackout
- collisions, grounding, oil spill, search and rescue
- management of other crises and accidents during pilotage.

Completion

The course is for pilots and pilot trainees only and must be completed at least every five years, see section 7(1)(i).

A certificate is issued to the course attendant for satisfactory completion of the theoretical and practical parts of the course.

References:

IMO Resolution A. 960(23), sections 5.3, 5.4 and 5.5.

The Danish Maritime Authority's guidance on tests for renewal of certificates of competency for navigators and tanker certificates at management level.

Ship handling for pilots

The purpose of the course is:

to train the pilot in basic/elementary ship handling techniques with the aid of pilotage in a relevant sailing area and to provide the pilot with knowledge and an understanding of how the POD propulsion systems work.

The course includes the following subjects:

Theoretical training in:

- manoeuvring options and strategies
- stopping distance

- Williamson turn
- constant rate of turn (ROT) techniques
- use of thrusters
- ships with azimuth propulsion systems
- rudders, types and effect
- propeller(s), types, effect, reversing effect, twin-screw ships
- harbour manoeuvring with propellers and different types of rudders
- banking effect
- overtaking
- meeting with other ships, including ship interaction
- sailing in various weather conditions (wind, current and waves)
- anchoring in general and twin anchoring with stern approach
- instrument navigation in reduced visibility or when sailing at night
- use of tugboats and escort towing
- squat effect
- under keel clearance
- pivot point
- hydrodynamics
- use of POD and Joystick/DP systems
- manoeuvring of large cruise ships.

Navigational training that supports and illustrates the above-mentioned theoretical elements, including:

- harbour manoeuvring with various relevant types of ship and equipment
- harbour manoeuvring under conditions where operational limits of POD/Azimuth propulsion are tested

- navigation and call at relevant ports with ships propelled by various POD/Azimuth propulsion systems
- harbour manoeuvring with twin-screws and rudders
- harbour manoeuvring with the use of tugboats
- navigation and approaching ports under various weather conditions (wind, current and waves)
- navigation under the influence of hydrodynamic effects such as banking effect
- navigation and approaching ports with the use of escort towing
- anchoring
- squat effect and passage of other ships
- Ship handling with fixed pitch as well as variable pitch propellers.

#### Completion

The above navigation training and ship handling techniques must be performed in a pilotage area relevant to the pilot.

- For certification for a category A pilotage area, training must be completed in manned models.
- For certification for a category A\*, B, B\* or C pilotage area, training may be completed in a full mission simulator.

The course is for pilots and pilot trainees only and must be completed at least every five years, see section 7(1)(ii).

At the end of the course, a certificate is issued to the course attendant for satisfactory completion of the theoretical and practical parts of the course.

#### References:

IMO Resolution A. 960(23), section 5.5.6.

#### Pilotage law course for pilots

The purpose of the course is:

To provide pilots with knowledge of relevant international and national laws, rules and regulations.

The course includes the following subjects:



- structure of the legal and administrative systems
- the Danish Pilotage Act and its current orders, etc.
- payment of pilots
- obligations of pilots
- compulsory pilotage and pilotage recommendation
- how to obtain a pilot certificate and a pilotage exemption certificate
- the pilot's liability, including sanctions
- maritime inquiry/oral evidence
- the Merchant Shipping Act
- deep-sea pilotage.

#### Completion

The course is for pilots and pilot trainees only and must be completed at least every five years, see section 7(1)(iii).

At the end of the course, a written certificate is issued to the course attendant for satisfactory completion of the theoretical and practical parts of the course.

#### References:

IMO Resolution A. 960(23), sections 5.5.8 and 6.3.

The Danish Maritime Authority's guidance on tests for renewal of certificates of competency for navigators and tanker certificates at management level.

#### Personal safety course for pilots

The purpose of the course is:

to train pilots in personal safety, techniques of personal survival at sea, emergency and first aid procedures including heart massage, resuscitation and hypothermia remediation.

Further, pilots must possess knowledge of risks and precautions related to transfer of persons and be able to take appropriate action in connection with man overboard situations and evacuation.

The course includes the following subjects:

### First aid:

- the four main principles of first aid
- life-saving first aid, including the use of a heart defibrillator
- cardiovascular diseases
- myocardial infarction/angina
- drowning and hypothermia
- crushing/falling injuries
- stopping bleeding
- communication with injured persons.

### Safety at sea:

- personal life-saving appliances, including emergency transmitters
- risks and precautions related to transfer of persons
- precautions if the pilot falls overboard, including possibilities and limitations of the vessel in relation to rescue
- familiarity with water/emergency suit
- survival techniques in water
- helicopter hoist
- capsizing exercises
- possibilities and limits of the life raft
- evacuation methods from large vessels, including evacuation chute
- summary evacuation exercise.

### Completion

To ensure that the pilot becomes familiar with the possibilities and limitations of his or her personal equipment, the practical part of the course must be carried out with the same type of equipment that is used by the pilot. Therefore, the pilot must bring his or her own suit and jacket for the course.

The course is completed when the attendant, in a practical exercise, has demonstrated knowledge of:

- the acquired theoretical knowledge in a written test. At least 80% of the answers given must be correct
- correct passage on the pilot ladder
- correct behaviour in relation to capsizing in open vessels
- individual and collective survival techniques in water
- entering the raft, and stay and reversal using a size of raft similar to that used by the pilotage service provider
- correct behaviour in connection with rescuing a person from the sea both as the rescued and the rescuing party by the use of a size of raft similar to that used by the pilotage service provider. The exercise must be carried out with typically used rescue tools such as cradle and rescue sling
- correct individual and collective behaviour in connection with the summary evacuation exercise. The evacuation exercise must sum up the practical elements in connection with evacuation from vessel to water, water to life raft and from life raft to helicopter.

The course is for pilots and pilot trainees only and must be completed at least every three years, see section 7(1)(iv).

A certificate is issued to the course attendant for satisfactory completion of the theoretical and practical parts of the course.

If a course attendant does not pass the above-mentioned tests, the course management and the course attendant must draw up a plan for the course attendant to complete the course satisfactorily within a period of six months.

References:

IMO Resolution A. 960(23), sections 5.5.9, 5.5.10 and 5.5.11.

The Danish Maritime Authority's guidance on tests for renewal of certificates of competency for navigators and tanker certificates at management level.

Ship-to-Ship Operations (STS)

The purpose of the course is:

To train the pilot in more advanced ship handling techniques and at the same time to practise good communication between the master and the pilot in actual ship handling exercises.

The course is divided into 3 stages of training:

- Stage 1, STS part I (Tug handling course for pilots)
- Stage 2, STS part II (Ships up to 65,000 GT)
- Stage 3, STS part III (Ships larger than 65,000 GT)

The course includes the following subjects:

- STS operations
- ship handling in connection with STS operations
- connection between the effect of rudders and engine/propellers
- use of bow thrusters
- use of various kinds of tugboats and how to use them
- ship-to-ship operations without the use of a tugboat
- navigation and ship handling in narrow waters and in port
- ship handling under various wind and current conditions
- tide effect
- banking effect
- anchoring ships
- emergency response
- navigation with fenders
- fender location, their effect, strength and limitations and their fastening
- mooring procedures according to varying conditions
- moorings and force effects
- mooring arrangement, contact and agreement with another ship
- briefing and exchange of experience between the master, the pilot and the mooring master
- debriefing after ship-to-ship operation.

Stage 2 (STS part II) includes training in:

- ship handling under various wind and current conditions
- anchoring of mother ship
- fender location, their effect, strength and limitations and their mooring
- connection between the effect of rudders and engine/propellers
- mooring procedures according to varying conditions and under force effects on moorings and fenders, including the order of moorings at arrival and departure
- Use of various types of tugboats, including advantages and disadvantages of the tugboats' position and place of use
- use of bow thrusters
- emergency response
- a review of current national regulation and international guidelines
- navigation exercises in a full mission simulator, including:
  - a. anchoring in connection with STS operations
  - b. STS operations during navigation (suction/pressure effects)
  - c. ship handling with large draught to obtain 'low tide effect', including the effect of difference in the ships' draughts for STS operations.

Participation in STS part II requires completion of the STS I course or the tug handling course for pilots.

Stage 3 (STS part III) includes training in:

- repetition of the training in theory, principles etc. from STS part I
- intensive and comprehensive simulator training in all types of STS operations, including emergency response
- briefing before and debriefing after all simulator exercises.

Participation in STS part III requires completion of the STS part II course, and at a minimum ten STS operations over the past five years.

Completion

The course is for pilots and pilot trainees only and must be completed at least every five years, see section 8(3).

At the end of the course, a certificate is issued to the course attendant for satisfactory completion of the theoretical and practical parts of the course.

References:

IMO Resolution A. 960(23), section 5.5.6.

OCIMF Ship to Ship Transfer Guide

Order no. 570 of 4 June 2014 on the transfer of liquid cargo between ships in Danish and Greenland territorial waters (STS operations) issued by the Danish Maritime Authority.

Tug handling course for pilots

The purpose of the course is:

To increase the pilot's understanding of tugboat operations, their possibilities and limitations, and to ensure good communication between tug master and pilot in the actual manoeuvring exercises.

The course includes the following subjects:

Theoretical training in:

- hydrodynamic elements
- the pivot point's influence under towing
- dangerous situations under towing
- towlines
- direct and indirect towing – Transverse Arrest
- escort towing
- use of various types of tugboats, including conventional, Azimuth Stern Drive, Voith Schneider, Rotor Tug and escort
- emergency response with tugboats
- human factors, including communication and orders to the tugboat
- navigational training that supports and illustrates the above-mentioned theoretical elements, including:

a. use of various types of tugboats, including Azimuth Stern Drive tugboat(s)

b. escort towing

c. emergency response.

- participating in towing operations on board the tugboat.

### Completion

The course is for pilots, pilot trainees and navigators only and must be completed at least every five years, see section 8(3).

At the end of the course, a certificate is issued to the course attendant for satisfactory completion of the theoretical and practical parts of the course.

The tug handling course for pilots is equated with the completion of STS Operations, part I.

### References:

IMO Resolution A. 960(23), section 5.5.6.

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## Annex 3

### Requirements for obtaining or maintaining a pilot certificate or a pilotage exemption certificate

#### Introduction:

The purpose of the requirements for obtaining or maintaining a pilot certificate or a pilotage exemption certificate is to ensure that an applicant reaches sufficient local knowledge of the individual pilotage areas, ports, fjords, channels and bridges in order for the applicant to be able to assess the risks connected with navigation in these pilotage areas.

To be issued with or maintain a pilot certificate or a pilotage exemption certificate, the applicant or holder must satisfy the applicable requirements for sailing frequency. Sailing frequency is defined as a number of pilotage assignments/sailing trips, broken down into the following categories:

Category A - For ships comprised by section 4 of the Danish Pilotage Act; at least 20 pilotage assignments/sailing trips per ongoing year from the certificate's issue date (high risk)

Category B - For ships comprised by section 4 of the Danish Pilotage Act; at least 10 pilotage assignments/sailing trips per ongoing year from the certificate's issue date (medium risk)

Category C - 5 pilotage assignments/sailing trips or fewer per ongoing year from the certificate's issue date (low risk and few pilotages). If the holder has not had at least one pilotage assignment/sailing trip in a Category C area for more than five years, the certification for the pilotage area concerned will be lost.

Category D - For ships not comprised by section 4 of the Danish Pilotage Act; at least 10 pilotage assignments/sailing trips per ongoing year from the certificate's issue date (high risk).

Category E - For ships not comprised by section 4 of the Danish Pilotage Act; at least 5 pilotage assignments/sailing trips per ongoing year from the certificate's issue date (medium risk).

Category \* - If the holder of a certificate for an A, B, or D pilotage area has met the requirements for sailing frequency for more than five years, the requirements will subsequently be reduced by half.

If the holder of a pilot certificate or a pilotage exemption certificate ceases to satisfy the conditions, he or she shall promptly notify the Danish Maritime Authority thereof.

Special provisions for pilot certificates:

The pilot certificate may be restricted to specific ship sizes, see section 2(3) of the Order on the issue of pilot certificates and pilotage exemption certificates.

A pilot must generally have performed at least three pilotage assignments at a certified upgrade step to become certified for the next upgrade step. However, the Danish Maritime Authority may prepare individual upgrading plans for the individual pilot taking into consideration his or her experience as a pilot, etc.

Special provisions for pilotage exemption certificates:

The use of a pilot is compulsory when fulfilling requirements for local knowledge for obtaining a pilotage exemption certificate for port, fjord, channel, bridge and STS operation areas as well as bunkering, see section 14(1)(i) of the Order on the issue of pilot certificates and pilotage exemption certificates.

The use of a pilot is not compulsory when fulfilling requirements for local knowledge for obtaining a pilotage exemption certificate for other pilotage areas if the applicant, during the sailing trip, is accompanied and trained by a navigator in possession of a valid pilotage exemption certificate for the pilotage area concerned, see section 14(2) of the Order on the issue of pilot certificates and pilotage exemption certificates.

Maps showing the division into pilotage areas in Danish waters and a chart of pilotage areas, including categories and upgrading requirements are available at the Danish Maritime Authority's website.

References:



Annex 4

Examination requirements for aptitude tests

Aptitude test for pilot certificate

Examination requirements to obtain a pilot certificate for a given pilotage area

- 1) limits of the pilotage area
- 2) International Regulations for Preventing Collision at Sea (COLREG)
  - a) Order on navigation, etc. in certain Danish waters
  - b) relevant orders and regulations on navigation
  - c) the Danish Pilotage Act and its orders
  - d) the Danish Act on Safety at Sea and the Act on Protection of the Marine Environment
- 3) system of buoyage
- 4) characteristics of the lights and their angles of visibility, fog signals, racons and radio beacons and other electronic aids, including virtual buoyage/AIS
- 5) names, positions and characteristics of buoys, beacons, structures and other marks
- 6) names and characteristics of channels, shoals, headlands and other characteristic features
- 7) bridge and similar obstruction limitations including air draughts
- 8) water depths, including tidal effects and similar factors
- 9) general knowledge of the tides and use of tide tables and real-time and current data systems, if available
- 10) routes, courses and distances
- 11) anchorages, anchoring
- 12) ship handling for piloting, anchoring, berthing and unberthing, manoeuvring with and without tugboats, and emergency situations
- 13) communication and availability of navigational information

- 14) navigational warning systems and other relevant information
- 15) traffic separation schemes, vessel traffic services and other navigational regulations
- 16) bridge and navigational aids
- 17) use of radar and other electronic devices, their limitations and capabilities as navigation and collision avoidance aids
- 18) manoeuvring behaviour of the types of ships expected to be piloted and limitations imposed by particular propulsion and steering systems
- 19) factors affecting ship performance such as wind, current, tide, load condition, water depth, bottom, bank and ship interaction including squat effect and under keel clearance
- 20) use and limitation of various types of tugboats
- 21) sufficient knowledge of English for the pilot to be able to communicate clearly
- 22) IMO Standard Marine Communication Phrases
- 23) IMO Code for the investigation of marine casualties and incidents
- 24) Bridge Team Management, including master-pilot relationship, operational procedures and Pilot Card
- 25) pollution prevention
- 26) emergency and contingency plans
- 27) safe embarking and disembarking procedures
- 28) any other relevant knowledge considered necessary.

The above numbering refers to IMO Resolution A. 960(23), section 7.

References:

IMO Resolution A. 960(23), section 7.

Aptitude test for pilotage exemption certificate

Examination requirements to obtain a pilotage exemption certificate for a given pilotage area

- 1) limits of the pilotage area
- 2) International Regulations for Preventing Collision at Sea (COLREG)

- a) Order on navigation, etc. in certain Danish waters
- b) relevant orders and regulations on navigation
- c) the Danish Pilotage Act and its orders
- d) the Danish Act on Safety at Sea
- e) the Act on Protection of the Marine Environment
- 3) system of buoyage
- 4) characteristics of the lights and their angles of visibility, fog signals, racons and radio beacons and other electronic aids, including virtual buoyage/AIS
- 5) names, positions and characteristics of buoys, beacons, structures and other marks
- 6) names and characteristics of channels, shoals, headlands and other characteristic features
- 7) bridge and similar obstruction limitations including air draughts
- 8) water depths, including tidal effects and similar factors
- 9) general knowledge of the tides and use of tide tables and real-time and current data systems, if available
- 10) routes, courses and distances
- 11) anchorages, anchoring
- 12) ship handling for piloting, anchoring, berthing and unberthing, manoeuvring with and without tugboats, and emergency situations
- 15) traffic separation schemes, vessel traffic services and other navigational regulations
- 16) pollution prevention
- 17) emergency and contingency plans
- 28) other relevant knowledge considered necessary, including
  - a) squat effect
  - b) under keel clearance
- 29) duty to report.

The above numbering refers to IMO Resolution A. 960(23), section 7.

## References:

IMO Resolution A. 960(23), section 7.

## Official notes

1) This Order contains provisions implementing parts of Directive 2005/36/EC of the European Parliament and of the Council of 7 September 2005 on the recognition of professional qualifications, Official Journal 2005, no. L 255, page 22, as amended most recently by Directive 2013/55/EU of the European Parliament and of the Council of 20 November 2013 amending Directive 2005/36/EC on the recognition of professional qualifications and Regulation (EU) no. 1024/2012 on administrative cooperation through the Internal Market Information System ('the IMI Regulation'), Official Journal 2013, no. L 354, page 132, and parts of Directive 2006/123/EC of 12 December 2006 on services in the internal market ('the Services Directive'), Official Journal 2006, no. L 376, page 36.