

SCHEDULE 4

Regulations 13 and 19

STANDARDS OF COMPETENCE FOR BOATMASTER'S LICENCES AND CERTIFICATES

PART 1

BOATMASTER'S LICENCES

Interpretation

1. In this Part—

“candidate” means a person wishing to apply for a boatmaster's licence of any class or an endorsement of a licence;

“examiner” means the person appointed under paragraph 8;

“qualifying service”, in relation to a Tier 2 licence, has the meaning given in regulation 11(10);

“syllabus” means the syllabus in paragraph 19.

Tier 1 licences: generic competencies

2. The competencies required by the holder of a Tier 1 licence are—

(a) (according to the class of licence held) the practical skills and underpinning knowledge set out in sections 1 to 3 of the syllabus, and

(b) (in every case) knowledge of—

(i) basic personal survival and fire fighting techniques, and

(ii) first aid,

to the extent that such knowledge is necessary for the waters in which the holder of the licence is authorised to serve as master.

3. The minimum level of knowledge necessary to meet the competency specified in paragraph 2(b) is an understanding of so much of the subject matter of section 12 of the syllabus as is appropriate to the class of licence.

Endorsements of Tier 1 licences: special competencies

4.—(1) The competencies required by the holder of an endorsement of a Tier 1 licence other than a radar endorsement are (according to the class of endorsement held) the practical skills and underpinning knowledge set out in sections 4 to 11 of the syllabus.

5.—(1) The competencies required for a radar endorsement are those which form the subject matter of the Small Ships Navigation and Radar Course.

(2) In sub-paragraph (1)—

“Small Ships Navigation and Radar Course” means the course for which the criteria and syllabus have been designed by the Merchant Navy Training Board and approved by the Maritime and Coastguard Agency.

Tier 2 licences: competencies

6. The competencies required by the holder of a Tier 2 licence are—

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- (a) such of the generic practical skills, underpinning knowledge and knowledge of personal survival and fire fighting techniques and first aid prescribed in relation to Tier 1 licences as are relevant to the type of vessel operations in which the applicant has undertaken his qualifying service and to the waters to which the licence will relate;
- (b) such of the further practical skills and underpinning knowledge as are prescribed in paragraph 4 or 5 of this Part of this Schedule in relation to endorsements of Tier 1 licences (other than the relevant local knowledge endorsement) as are relevant to the type of vessel and operations on which the applicant has undertaken his qualifying service and to the waters to which the licence will relate;
- (c) knowledge of so much of the subject matter of section 11 of the syllabus as is relevant to the operational area to which the licence relates.

Evidence of attainment of appropriate standard of competence

7. Each candidate must keep the following written records—
- (a) a record of the necessary practical skills he has mastered and the knowledge and experience he has gained which are relevant to the class of licence or endorsement he wishes to apply for (the “Task Record Book”), and
 - (b) a record of his service and experience on vessels and in waters which are appropriate to the class of licence or endorsement he intends to apply for.
8. Subject to paragraph 9, a candidate’s standard of competence must be assessed by a person who is—
- (a) appointed for that purpose by the Secretary of State, or
 - (b) appointed by a person approved by the Secretary of State for the purpose of appointing examiners.
- 9.—(1) A candidate is deemed to have the appropriate knowledge of basic personal survival and fire fighting techniques and first aid if he produces evidence to the Secretary of State that he has successfully completed a course the subject matter of which satisfies the requirements of paragraph 3.
- (2) A candidate is deemed to have the competencies required for the issue of a radar endorsement if he produces evidence to the Secretary of State that he has successfully completed the Small Ships Navigation and Radar Course.
- (3) In this paragraph, “successfully completed” means completed to the satisfaction of a person approved by the Maritime and Coastguard Agency who has provided the course.
10. An application for an assessment of competence or part of an assessment—
- (a) must be in such form and contain, or be accompanied by, such particulars and documents as the Secretary of State may specify, and
 - (b) must be accompanied by the prescribed fee.
11. A candidate attending for the part of the assessment described in paragraph 12(1)(c) must produce his Task Record Book to the examiner.
- 12.—(1) The assessment may, at the examiner’s discretion, consist of all or any of the following—
- (a) a practical test of seamanship and vessel handling skill in a variety of circumstances chosen by the examiner and conducted on board a vessel of a kind reasonably representative of the class of vessel the command of which the licence or endorsement would authorise in waters appropriate to that class of licence or endorsement,

- (b) a written or oral test of the candidate's knowledge underpinning his practical skills, and
 - (c) oral questions about the entries in the Task Record Book,
- (2) Different parts of the assessment may, if the examiner agrees, take place on different occasions.

13. In the case of a candidate holding a qualification mentioned in regulation 35(1), a boatmaster's certificate issued in an EEA State other than the United Kingdom or a Rhine navigation licence, the examiner may, in conducting his assessment, take account of the experience which the candidate has had of commanding or having charge of vessels.

14. The examiner must as soon as practicable submit a report of his assessment to the Secretary of State and if he is satisfied that the candidate possesses the necessary competencies the Secretary of State must issue the appropriate boatmaster's licence or endorsement to the candidate.

Representations by aggrieved candidates

15.—(1) A candidate who is aggrieved by an assessment may make representations in writing to the Secretary of State, care of the Customer Care Manager at the appropriate Regional Office of the Maritime and Coastguard Agency setting out his complaint and the reasons for it.

(2) Upon receipt of such representations, the Customer Care Manager must investigate the complaint and if he considers it is justified may offer to take such action in relation to the complaint as he thinks fit.

16.—(1) A candidate who is not satisfied with the action offered may appeal in writing to the Chief Executive of the Agency at Spring Place, 105 Commercial Road, Southampton SO15 1EG setting out the grounds of his appeal.

(2) Upon receipt of such representations, the Chief Executive must investigate the complaint and if he considers it is justified may offer to take such action in relation to the complaint as he thinks fit.

17.—(1) A candidate who is not satisfied with the action offered may ask the Chief Executive to refer the complaint to an independent adjudicator for a review of the fairness of the handling of the complaint.

(2) The independent adjudicator may request such further written evidence as he reasonably requires and may make such recommendations as he thinks fit to the Chief Executive who must act upon them.

18. For the avoidance of doubt, in paragraphs 15 to 17 "writing" includes e-mail.

Syllabus

19. The syllabus is set out below—

Section 1. Generic competencies: Waters of categories A to D and the sea

1. Bridge watchkeeping
2. Meteorology
3. Ship manoeuvring
4. Vessel handling in extreme weather
5. Mooring and unmooring a vessel
6. Ropework, access and lifting gear
7. Ship knowledge (construction, maintenance, etc)

8. Basic engineering knowledge and machinery
9. Health and safety issues
10. Emergency action
11. Pollution prevention and handling and waste management

Section 2. Generic competencies: Waters of categories A and B only

1. Generic chartwork: waterway guides and maps where available
2. Ship manoeuvring: rigid or small tug towing
3. Locks and bridges

Section 3. Generic competencies: Waters of categories C and D and the sea

1. Tides and currents
2. Compass work
3. Bridge watchkeeping: steering by compass
4. Generic chartwork: use of nautical charts
5. Anchor work

Section 4. Passenger operations (general) endorsement

1. Knowledge of Domestic Safety Management Code requirements (Merchant Shipping Notice 1754 and Marine Guidance Note 158)
2. Procedures following an emergency, including recovery from the water, running aground, collision damage, fire and explosion (Merchant Shipping Notice 1754 and Marine Guidance Note 158)
3. First Aid – awareness of equipment carried and action required (i.e. pertaining to care of passengers – basic first aid covered in generic licence syllabus)
4. Pre-voyage procedures, including pre-voyage checks, crew briefing and passenger safety announcements, passenger counting and reporting (Merchant Shipping Notice 1729)
5. Firefighting equipment as fitted on vessel and appropriate to category of waters (not including basic Fire Safety covered in generic licence syllabus)
6. Lifesaving appliances as fitted on vessel and appropriate to category of waters (not including basic water safety/personal survival covered in generic licence syllabus)
7. Fire prevention on passenger vessels – e.g. “No Smoking” areas
8. Knowledge of safety instructions (main and auxiliary emergency exits, gangplank, fire and evacuation plans and routes)

Section 5. Large passenger vessel endorsement

1. Berthing and unberthing of a large passenger vessel including management of crew duties
2. Specific manoeuvring skills
3. Crew pre-voyage briefing, passenger safety announcement
4. Knowledge of man overboard and recovery procedure with large vessel
5. Storage capacity, on board distribution, filling procedures for bunkers on large vessels
6. Pollution control measures with bunkers for large vessels
7. Knowledge of type, bhp, reduction gearboxes, power take-off uses on large vessels
8. Knowledge of type, KVA, power supply, other appliances on large vessels
9. Steering, anchor handling, engine controls on large vessels

10. Monitoring equipment, pumping system, pipelines on large vessels
11. Effective knowledge of all routine and emergency procedures under the Domestic Safety Management Code for the vessel
12. Knowledge of contents of first aid box
13. Control procedures for dealing with unruly passengers in large numbers
14. Use of public address system in an emergency

Section 6. Towing and pushing endorsement

1. Preparations for towing
2. Securing and letting go tow
3. Manoeuvring and managing tug and tow
4. Hazard identification and safety issues

Section 7. Cargo endorsement

General cargoes

1. Opening and closing cargo holds – risks, dangers and principles of safety
2. Loading and discharging – rigging of cargo gear, proper and appropriate use of slings and other types of lifting equipment, special loads management
3. Stowage and securing of cargoes including bulk cargoes
4. Loading and discharging – effects on stability
5. Loading and discharging procedures for bulk liquid, and powder, cargoes – awareness of free-surface effect on stability
6. Hold cleaning and preparation for cargoes
7. Ventilation of cargo holds
8. Stowage and securing of cargoes, including bulk cargoes – stowage and loading/unloading plans in context of vessel's longitudinal strength; division of responsibilities between MCA and HSE
9. Liquid and powder cargoes – characteristics and storage

Packaged dangerous goods

1. Awareness of the 9 (UN) classes of dangerous cargoes as defined in the International Maritime Dangerous Goods (IMDG) Code and other sources
2. Awareness of the labels, marks and signs used to designate cargoes within those classes as indicated in the IMDG Code and other sources

Ro-ro operations

1. Loading, discharging and securing of vehicles
2. Vessel stability
3. Watertight integrity

Section 8. Oil and chemical cargo endorsement

1. Liquid cargoes – characteristics and storage
2. Dangerous cargoes – demonstrate knowledge of risks and safety precautions when handling
3. Hazardous cargoes – knowledge of risks (e.g. spontaneous combustion)
4. Documentation and cargo sampling procedures

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5. Loading and discharging procedures for bulk oil and chemical cargoes – setting-up, connecting and disconnecting cargo lines, nozzles, hoses and couplings; operation of pumps and pipelines; dipping of tanks; taking samples of cargo; awareness of free-surface effect on stability
6. Ventilation and venting of cargo tanks
7. Knowledge of safety procedures and appropriate Personal Protective Equipment (PPE) for loading and discharging dangerous cargoes (Merchant Shipping Notice 1731)
8. (Where fitted to vessel) knowledge and understanding of Crude Oil Washing (COW) and Inert Gas (IG) systems
9. Appreciation of Code of Safe Practice for Solid Bulk Cargoes (BC Code)
10. Knowledge and use of spill clean-up materials
11. Pollution prevention equipment and pollution control measures and minimising environmental damage – full specific knowledge
12. Awareness of International Convention for the Prevention of Pollution from Ships (MARPOL) Annexes 2 and 3

Section 9. Dredging endorsement

1. Awareness and management of specific stability problems
2. Navigational hazards
3. Loading and discharging – demonstrate best principles
4. Managing operation to maintain personal safety
5. Awareness of free-surface effects
6. Bottom hazards
7. Air draft considerations including power cables

Section 10. Fast craft endorsement

1. Knowledge of all on-board propulsion systems, including communication and navigational equipment, steering, electrical, hydraulic and pneumatic systems and bilge and fire
2. The failure mode of the control, steering and propulsion systems and proper response to such failure
3. Handling characteristics of the craft and the limiting operational conditions
4. Bridge communication and navigation procedures
5. Impact and damage stability and survivability of the craft in damaged condition
6. Location and use of the craft's life-saving appliances, including survival craft equipment
7. Location and use of escapes in the craft and the evacuation of passengers
8. Location and use of fire protection and extinguishing appliances and systems in the event of fire on board
9. Location and use of damage control appliances and systems, including operation of watertight doors and bilge pumps
10. Cargo and vehicle stowage and securing systems
11. Methods for control of and communication with passengers in an emergency
12. Location and use of all other items listed in the vessel's training manual

Section 11. Relevant local knowledge endorsements

1. In any area, a good knowledge of local navigational regulations and byelaws
2. In an area where appropriate, knowledge of—
 - (a) navigation authority publications
 - (b) local signals and traffic regulations
 - (c) local marks, including buoyage, lights, leading lights and marks
 - (d) local dangers to navigation – including depths over banks, obstructions, currents and abnormal tidal streams
 - (e) local safe havens and landing places in differing weather conditions
 - (f) the times and heights of tides
 - (g) safe courses in and out of local harbours
 - (h) the location of, and means of communication with, the nearest Coastguard centre and other emergency services
 - (i) local language terminology, including radio communications
 - (j) local VTS and traffic control
 - (k) local traffic density and patterns
 - (l) types of traffic to be encountered
 - (m) fixed items and air draft hazards (e.g. bridges)
 - (n) other items of local knowledge which an examiner may deem to be necessary (e.g. current notices to mariners on temporary works)

Section 12. Personal survival, fire fighting and first aid competencies

<i>(1) Knowledge or competency</i>	<i>(2) Waters for which it is necessary</i>
<i>Personal survival and water safety</i>	
Awareness of safe practices and accident prevention in order to minimise risks	All waters
Awareness of the types of emergencies that might occur (e.g. collisions, fire, foundering, man-overboard)	All waters
Knowledge of life saving appliances normally carried on inland waterways vessels for the relevant areas of operation (e.g. lifebuoys, lifejackets, lines)	All waters
Correct utilisation of appliances to aid another crew member, or self, in the water	All waters
Knowledge of types of lifejackets likely to be encountered	Categories C and D and sea
Donning and use of lifejackets	Categories C and D and sea
Knowledge of effects of immersion in water and hypothermia (including how to treat)	All waters
Knowledge of recovery procedures in man-overboard situations	All waters
Liferafts:	Categories C and D and sea
awareness of types likely to be encountered	
stowage and deployment	

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(1) Knowledge or competency	(2) Waters for which it is necessary
awareness of maintenance and servicing requirements knowledge of hydrostatic release units	
<i>Fire safety</i>	
Theory of combustion and the “fire triangle”	All waters
Knowledge of types and sources of ignition likely to be encountered on vessels	All waters
Awareness of flammable materials, fire hazards and spread of fire	All waters
Knowledge of best practice precautions and awareness of need for vigilance	All waters
Knowledge of classification of fires (A, B, C & D) and correct extinguishing equipment and methods for each type	All waters
Knowledge of types of extinguishers: water, dry powder, foam, CO ₂ , fire blanket, etc	All waters
Know how to extinguish a fire (and demonstrate practical use of extinguishers)	All waters
Knowledge of correct location of firefighting equipment on vessel	All waters
Awareness of types and use of fixed fire-fighting installations on large vessels	Categories C and D and sea
Knowledge of correct sequence for fire detection and raising the alarm (“FIRE”): find, inform, restrict, extinguish	All waters
<i>First aid</i>	
	All waters
Awareness of body structure and functions	All waters
Knowledge of the measures to be taken in cases of emergency, including—	
(a) how to position a casualty	All waters
(b) how to apply resuscitation techniques and maintain clear airway	All waters
(c) how to control bleeding	All waters
(d) how to apply appropriate measures of basic shock management	All waters
(e) appropriate measures in the event of burns and scalds, including accidents caused by electric current	All waters
(f) how to rescue and transport a casualty	Categories C and D and sea

<i>(1) Knowledge or competency</i>	<i>(2) Waters for which it is necessary</i>
(g) how to improvise bandages and use materials in emergency kit	All waters
(h) how to raise the alarm efficiently and effectively for accidents or medical emergencies in different situations	All waters
(i) how to identify promptly the probable cause, nature and extent of any injuries	Categories C and D and sea

PART 2

BOATMASTERS' CERTIFICATES

Interpretation

1. In this Part—

“candidate” means a person wishing to apply for a boatmaster’s certificate of any class;

“examiner” means the person appointed under paragraph 8;

“syllabus” means the syllabus set out in paragraph 19;

Group A and B certificates: generic competencies

2. The competencies required by the holder of a general Group A certificate are the practical skills and underpinning knowledge set out in section 1 of the syllabus.

3. The competencies required by the holder of a general Group B certificate are the practical skills and underpinning knowledge set out in section 2 of the syllabus.

Group A and B certificates: special competencies

4. The competencies required by the holder of a Group A or Group B certificate attesting competence in radar navigation are the practical skills and underpinning knowledge set out in section 3 of the syllabus.

5. The competencies required by the holder of a Group A or Group B certificate attesting competence in passenger transport are the practical skills and underpinning knowledge set out in section 4 of the syllabus.

6. The competencies required by the holder of a Group A or Group B certificate attesting knowledge of local navigation requirements are the practical skills and underpinning knowledge set out in section 5 of the syllabus.

Evidence of attainment of appropriate standard of competence

7. Each candidate must keep a written record (a “Task Record Book”) of the necessary practical skills he has mastered and the knowledge and experience he has gained which are relevant to the class of certificate he wishes to apply for.

8. A candidate’s standard of competence must be assessed by a person who is—

(a) appointed for that purpose by the Secretary of State, or

- (b) appointed by a person approved by the Secretary of State for the purpose of appointing examiners.
- 9. An application for an assessment of competence or part of an assessment—
 - (a) must be in such form and contain, or be accompanied by, such particulars and documents as the Secretary of State may specify, and
 - (b) must be accompanied by the prescribed fee.
- 10. A candidate attending for the part of the assessment described in paragraph 11(2)(b) must produce his Task Record Book to the examiner.
- 11.—(1) Except where paragraph 12 applies, the assessment must consist of—
 - (a) (where necessary) a practical test of seamanship and vessel handling skill in a variety of circumstances chosen by the examiner and conducted on board a vessel of a kind reasonably representative of the class of vessel the command of which the certificate would authorise in waters appropriate to that class of certificate; and
 - (b) an oral test of the candidate's knowledge underpinning his practical skills.
 (2) Subject to paragraphs 12 and 13, the assessment may, at the examiner's discretion include—
 - (a) a written examination to test part or all of the candidate's knowledge underpinning his practical skills, and
 - (b) questions about the entries in the Task Record Book.
 (3) Different parts of the assessment may, if the examiner agrees, take place on different occasions.
- 12. This paragraph applies where the candidate holds a Tier 1 boatmaster's licence with both cargo and towing and pushing endorsements.
- 13. Where paragraph 12 applies—
 - (a) the examiner must assess the candidate's knowledge of the subject matter of those items in the syllabus for a Group A or Group B certificate marked (a) and (b) under the heading "Navigation" and (b) under the heading "Vessel construction and stability";
 - (b) the examiner may assume (unless he has reason to believe otherwise) that the candidate possesses the remaining practical skills and underpinning knowledge required by the holder of a certificate of the group for which he has applied;
 - (c) the examiner may conduct—
 - (i) a test mentioned in paragraph 11(1), or
 - (ii) the test mentioned in paragraph 11(2)(b),
 if, and only if, he reasonably believes it to be necessary.
- 14. The examiner must as soon as practicable submit a report of his assessment to the Secretary of State and if he is satisfied that the candidate possesses the necessary competencies the Secretary of State must issue the appropriate boatmaster's certificate to the candidate.

Representations by unsuccessful candidates

- 15.—(1) A candidate who is aggrieved by an assessment may make representations in writing to the Secretary of State, care of the Customer Care Manager at the appropriate Regional Office of the Maritime and Coastguard Agency setting out his complaint and the reasons for it.

(2) Upon receipt of such representations, the Customer Care Manager must investigate the complaint and if he considers it is justified may offer to take such action in relation to the complaint as he thinks fit.

16.—(1) A candidate who is not satisfied with the action offered may appeal in writing to the Chief Executive of the Agency at Spring Place, 105 Commercial Road, Southampton SO15 1EG setting out the grounds of his appeal.

(2) Upon receipt of such representations, the Chief Executive must investigate the complaint and if he considers it is justified may offer to take such action in relation to the complaint as he thinks fit.

17.—(1) A candidate who is not satisfied with the action offered may ask the Chief Executive to refer the complaint to an independent adjudicator for a review of the fairness of the handling of the complaint.

(2) The independent adjudicator may request such further written evidence as he reasonably requires and may make such recommendations as he thinks fit to the Chief Executive who must act upon them.

18. For the avoidance of doubt, in paragraphs 15 to 17 “writing” includes e-mail.

Syllabus

19. The syllabus is as follows—

Section 1: General Group A certificates

1. Navigation

- (a) Exact knowledge of the traffic regulations of inland and maritime waterways, particularly the European Code for Inland Waterways and of the International Regulations for Preventing Collision at Sea and nautical signing (designation and buoying of waterways).
- (b) Knowledge of the general geographical, hydrological, meteorological and morphological characteristics of the main inland and maritime waterways.
- (c) Terrestrial navigation, including determination of course, position lines and ship’s position, nautical printed matter and publications, sea chart work, nautical marks and buoyage systems, checking of the compass and bases of tidology.

2. Vessel manoeuvring and handling

- (a) Handling of the vessel taking into account the effect of wind, current, thrust deduction and draught for the evaluation of sufficient buoyancy and stability.
- (b) The role and functioning of the rudder and propeller.
- (c) Anchoring and berthing in all conditions.
- (d) Manoeuvres in ports and locks and when meeting and passing other vessels.

3. Vessel construction and stability

- (a) Knowledge of the basic principles of vessel construction with particular regard to the safety of the crew, other persons and the vessel.
- (b) Basic knowledge of Directive [82/714/EEC](#) of 4 October 1982⁽¹⁾, laying down the technical provisions for inland waterway vessels.
- (c) Basic knowledge of the main component parts of the vessel.

(1) OJNo. L301, 28.10.1982, p.1.

- (d) Theoretical knowledge of the buoyancy and stability rules and their practical application, especially seaworthiness.
- (e) Additional requirements, and in particular additional equipment, for maritime waterways.
- 4. *Engines*
 - (a) Basic knowledge of the design and working of the engines to ensure their proper functioning.
 - (b) Operation and inspection of the main and auxiliary engines and action to be taken in case of malfunction.
- 5. *Loading and unloading*
 - (a) Use of draught indicators.
 - (b) Determination of the loading weight using the certificate of measurement.
 - (c) Loading and unloading and stowage of cargo (the stowage plan).
- 6. *Action in special circumstances*
 - (a) Principles of accident prevention.
 - (b) Measures to be taken in the event of damage, collision and running aground, including the sealing of leaks.
 - (c) Use of rescue apparatus and equipment.
 - (d) First aid in the event of accidents.
 - (e) Prevention of fires and use of fire-fighting equipment.
 - (f) Prevention of pollution of waterways.
 - (g) Specific measures relating to the rescue of persons, vessels and cargo on maritime shipping routes and survival in distress.

Section 2: General Group B certificates

- 1. *Navigation*
 - (a) Exact knowledge of the traffic regulations of inland and maritime waterways, particularly the European Code for Inland Waterways, including nautical signing (designation and buoying of waterways).
 - (b) Knowledge of the general geographical, hydrological, meteorological and morphological characteristics of the main inland waterways.
 - (c) Determination of course, nautical printed matter and publications and buoyage systems.
- 2. *Vessel manoeuvring and handling*
 - (a) Handling of the vessel taking into account the effect of wind, current, thrust deduction and draught for the evaluation of sufficient buoyancy and stability.
 - (b) The role and functioning of the rudder and propeller.
 - (c) Anchoring and berthing in all conditions.
 - (d) Manoeuvres in ports and locks and when meeting and passing other vessels.
- 3. *Vessel construction and stability*
 - (a) Knowledge of the basic principles of vessel construction with particular regard to the safety of the crew, other persons and the vessel.
 - (b) Basic knowledge of Directive [82/714/EEC](#) of 4 October 1982 on the technical provisions for inland waterway vessels.

- (c) Basic knowledge of the main component parts of the vessel.
- (d) Theoretical knowledge of the buoyancy and stability rules and their practical application.
- 4. *Engines*
 - (a) Basic knowledge of the design and working of the engines to ensure their proper functioning.
 - (b) Operation and inspection of the main and auxiliary engines and action to be taken in case of malfunction.
- 5. *Loading and unloading*
 - (a) Use of draught indicators.
 - (b) Determination of the loading weight using the certificate of measurement.
 - (c) Loading and unloading and stowage of cargo (the stowage plan).
- 6. *Action in special circumstances*
 - (a) Principles of accident prevention.
 - (b) Measures to be taken in the event of damage, collision and running aground, including the sealing of leaks.
 - (c) Use of rescue apparatus and equipment.
 - (d) First aid in the event of accidents.
 - (e) Prevention of fires and use of fire-fighting equipment.
 - (f) Prevention of pollution of the waterways.

Section 3: Additional subjects for radar navigation certification

- (a) Knowledge of radar theory, general knowledge of radioelectric waves and principles of radar operation.
- (b) Ability to use radar equipment, interpretation of the radar display, analysis of the information obtained and knowledge of the limits of that information.
- (c) Use of the turn indicator.
- (d) Knowledge of the ECIW rules on radar navigation.

Section 4: Additional knowledge for passenger transport certification

- (a) Basic knowledge of technical regulations on the stability of passenger vessels in case of damage, division into watertight compartments and plane of maximum draught.
- (b) First aid in case of accidents.
- (c) Fire prevention and fire-fighting equipment.
- (d) Life-saving methods and equipment.
- (e) How to protect passengers in general and especially in the case of evacuation, damage, collision, running aground, fire, explosion and other situations which may give rise to panic.
- (f) Knowledge of safety instructions; emergency exits, gangplank and use of emergency helm.

Section 5: Additional knowledge for local navigational knowledge certification

The practical skills and underpinning knowledge required for the issue of a relevant local knowledge endorsement of a boatmaster's licence.

Status: *This is the original version (as it was originally made).*