# ANNEX I

#### MINIMUM REQUIREMENTS FOR AGE, ADMINISTRATIVE COMPLIANCE, COMPETENCE AND NAVIGATION TIME

The minimum requirements for the deck crew qualifications set out in this Annex are to be understood as an ascending level of qualifications, with the exception of the qualifications of deckhands and apprentices, which are considered to be at the same level.

- 1 Deck crew qualifications at entry level
- 1.1 Minimum requirements for certification as a deckhand

Every applicant for a Union certificate of qualification shall:

- be at least 16 years of age;
- have completed basic safety training according to national requirements.
- 1.2 Minimum requirements for certification as an apprentice

Every applicant for a Union certificate of qualification shall:

- be at least 15 years of age;
- have signed an apprenticeship agreement which provides for an approved training programme as referred to in Article 19.
- 2 Deck crew qualifications at operational level
- 2.1 Minimum requirements for certification as a boatman

Every applicant for a Union certificate of qualification shall:

- (a) be at least 17 years of age;
  - have completed an approved training programme, as referred to in Article
    19, which was of a duration of at least two years, and which covered the standards of competence for the operational level set out in Annex II;
  - have accumulated navigation time of at least 90 days as part of this approved training programme;
    - or
- (b) be at least 18 years of age;
  - have passed an assessment of competence by an administrative authority as referred to in Article 18, to verify that the standards of competence for the operational level set out in Annex II are met;
  - have accumulated navigation time of at least 360 days, or have accumulated navigation time of at least 180 days if the applicant can also provide proof of work experience of at least 250 days that the applicant acquired on a seagoing ship as a member of the deck crew;

or

(c) — have a minimum of five years' work experience prior to the enrolment in an approved training programme, or have at least 500 days' work experience on a sea-going ship as a member of the deck crew prior to the enrolment in an approved training programme, or have completed any vocational training programme of at least three years' duration prior to the enrolment in an approved training programme;

- have completed an approved training programme as referred to in Article 19, which was of a duration of at least nine months, and which covered the standards of competence for the operational level set out in Annex II;
- have accumulated navigation time of at least 90 days as part of that approved training programme.
- 2.2 Minimum requirements for certification as an able boatman

Every applicant for a Union certificate of qualification shall:

- (a) have accumulated navigation time of at least 180 days while qualified to serve as boatman;
  - or
- (b) have completed an approved training programme as referred to in Article 19, which was of a duration of at least three years, and which covered the standards of competence for the operational level set out in Annex II;
  - have accumulated navigation time of at least 270 days as part of this approved training programme.
- 2.3 Minimum requirements for certification as a helmsman

Every applicant for a Union certificate of qualification shall:

- (a) have accumulated navigation time of at least 180 days while qualified to serve as able boatman;
  - hold a radio operator's certificate;

or

- (b) have completed an approved training programme as referred to in Article 19, which was of a duration of at least three years, and which covered the standards of competence for the operational level set out in Annex II;
  - have accumulated navigation time of at least 360 days as part of this approved training programme;
  - hold a radio operator's certificate;

or

- (c) have a minimum of 500 days' work experience as a maritime master;
   have passed an assessment of competence by an administrative authority as referred to in Article 18 to verify that the standards of competence for the operational level set out in Annex II are met;
   hold a radio operator's certificate.
- 3 Deck crew qualifications at management level
- 3.1 Minimum requirements for certification as a boatmaster

Every applicant for a Union certificate of qualification shall:

- (a) be at least 18 years of age;
  - have completed an approved training programme as referred to in Article
    19, which was of a duration of at least three years and which covered the
    standards of competence for the management level set out in Annex II;

 have accumulated navigation time of at least 360 days as part of this approved training programme or after completion thereof;

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

— hold a radio operator's certificate;

or

- (b) be at least 18 years of age;
  - hold a Union certificate of qualification as a helmsman or a certificate as a helmsman recognised in accordance with Article 10(2) or (3);
  - have accumulated navigation time of at least 180 days;
  - have passed an assessment of competence by an administrative authority as referred to in Article 18 to verify that the standards of competence for the management level set out in Annex II are met;
  - hold a radio operator's certificate;
    - or
- (c) be at least 18 years of age;
  - have accumulated navigation time of at least 540 days, or have accumulated navigation time of at least 180 days, if the applicant can also provide proof of work experience of at least 500 days that the applicant acquired on a seagoing ship as a member of the deck crew;
  - have passed an assessment of competence by an administrative authority as referred to in Article 18 to verify that the standards of competence for the management level set out in Annex II are met;
  - hold a radio operator's certificate;
    - or
- (d) have a minimum of five years' work experience prior to the enrolment in an approved training programme, or have at least 500 days' work experience on a sea-going ship as a member of the deck crew prior to the enrolment in an approved training programme, or have completed any vocational training programme of at least three years' duration prior to the enrolment in an approved training programme;
  - have completed an approved training programme referred to in Article 19, which was of a duration of at least one and a half years, and which covered the standards of competence for the management level set out in Annex II;
  - have accumulated navigation time of at least 180 days as part of that approved training programme and at least 180 days after completion thereof;
    hold a radio operator's certificate.
- 3.2 Minimum requirements for specific authorisations for Union certificates of qualification as a boatmaster
- 3.2.1 Waterways with a maritime character

Every applicant shall:

- meet the standards of competence for sailing on waterways with a maritime character set out in Annex II.
- 3.2.2 Radar

Every applicant shall:

- meet the standards of competence for sailing with the aid of radar set out in Annex II.
- 3.2.3 Liquefied natural gas

Every applicant shall:

- hold a Union certificate of qualification as a liquefied natural gas (LNG) expert referred to in section 4.2.
- 3.2.4 Large convoys

Every applicant shall have accumulated navigation time of at least 720 days, including at least 540 days while qualified to serve as a boatmaster and at least 180 days in steering a large convoy.

- 4 Qualifications for specific operations
- 4.1 Minimum requirements for the certification of a passenger navigation expert Every applicant for the first Union certificate of qualification as a passenger navigation expert shall:
  - be at least 18 years of age;
  - meet the standards of competence for passenger navigation experts set out in Annex II.

Every applicant for the renewal of a Union certificate of qualification as a passenger navigation expert shall:

- pass a new administrative exam or complete a new approved training programme in accordance with Article 17(2).
- 4.2 Minimum requirements for certification as a LNG expert

Every applicant for the first Union certificate of qualification as a LNG expert shall:

- be at least 18 years of age;
  - meet the standards of competence for LNG experts set out in Annex II.

Every applicant for the renewal of a Union certificate of qualification as a LNG expert shall:

- (a) have accumulated the following navigation time aboard a craft using LNG as fuel:
  - at least 180 days during the previous five years; or
  - at least 90 days during the previous year;

or

(b) meet the standards of competence for LNG experts set out in Annex II.

# ANNEX II

# ESSENTIAL COMPETENCE REQUIREMENTS

- 1 Essential competence requirements at operational level
- 1.1 Navigation

The boatman shall assist the management of the craft in situations of manoeuvring and handling a craft on inland waterways. The boatman shall be able to do so on all types of waterways and in all types of ports. In particular the boatman shall be able to:

- assist in preparing the craft for sailing, in order to ensure a safe voyage in all circumstances;
- assist with mooring and anchoring operations;
- assist in the sailing and manoeuvring of the craft in a nautically safe and economical way.
- 1.2 Operation of craft

The boatman shall be able to:

- assist the management of the craft in controlling the operation of the craft and in the care of persons on board;
- use the equipment of the craft.
- 1.3 Cargo handling, stowage and passenger transport

The boatman shall be able to:

- assist the management of the craft in the preparation, stowage and monitoring of cargo during loading and unloading operations;
- assist the vessel's management in providing services to passengers;
- provide direct assistance to disabled persons and persons with reduced mobility in accordance with the training requirements and instructions of Annex IV of Regulation (EU) No 1177/2010 of the European Parliament and of the Council<sup>(1)</sup>;
- 1.4 Marine engineering and electrical, electronic and control engineering

The boatman shall be able to:

- assist the management of the craft in marine, electrical, electronic, and control engineering to ensure general technical safety;
- perform maintenance work on marine, electrical, electronic, and control engineering equipment to ensure general technical safety.
- 1.5 Maintenance and repair

The boatman shall be able to:

- assist the management of the craft in maintaining and repairing the craft, its devices and its equipment.
- 1.6 Communication

The boatman shall be able to:

- communicate generally and professionally, which includes the ability to use standardised communication phrases in situations with communication problems;
  be sociable.
- 1.7 Health and safety and environmental protection

The boatman shall be able to:

- adhere to safe working rules, understand the importance of health and safety rules and the importance of the environment;
- acknowledge the importance of training on safety aboard and act immediately in the event of emergencies;
- take precautions to prevent fire, and use the firefighting equipment correctly;
- perform duties, taking into account the importance of protecting the environment.

- 2 Essential competence requirements for competences at management level
- 2.0 Supervision

The boatmaster shall be able to:

- instruct other deck crew members and supervise the tasks they exercise, as referred to Section 1 of this Annex, implying adequate abilities to perform these tasks.
- 2.1 Navigation

The boatmaster shall be able to:

- plan a journey and conduct navigation on inland waterways, including being able to choose the most logical, economic and ecological sailing route to reach the loading and unloading destinations, taking into account the applicable traffic regulations and agreed set of rules applicable in inland navigation;
- apply knowledge of the applicable rules on the manning of craft, including knowledge on resting time and on deck crew members composition;
- sail and manoeuvre, ensuring the safe operation of the craft in all conditions on inland waterways, including in situations that involve high traffic density or where other craft carry dangerous goods and require basic knowledge on the European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (ADN);
- respond to navigational emergencies on inland waterways.
- 2.2 Operation of craft

The boatmaster shall be able to:

- apply knowledge of inland waterway shipbuilding and construction methods to the operation of various types of craft and have basic knowledge of the technical requirements for inland waterway vessels, as referred to in Directive (EU) 2016/1629 of the European Parliament and of the Council<sup>(2)</sup>;
- control and monitor the mandatory equipment as mentioned in the applicable craft certificate.
- 2.3 Cargo handling, stowage and passenger transport

The boatmaster shall be able to:

- plan and ensure the safe loading, stowage, securing, unloading and care of cargoes during the voyage;
- plan and ensure the stability of the craft;
- plan and ensure the safe transport of and care for passengers during the voyage, including providing direct assistance to disabled persons and persons with reduced mobility in accordance with the training requirements and instructions of Annex IV of Regulation (EU) No 1177/2010.
- 2.4 Marine engineering and electrical, electronic and control engineering

The boatmaster shall be able to:

- plan the workflow of marine engineering and electrical, electronic and control engineering;
- monitor the main engines and auxiliary machinery and equipment;
- plan and give instructions in relation to the pump and the pump control system of the craft;

- organise the safe use and application, maintenance and repair of the electro-technical devices of the craft;
- control the safe maintenance and repair of technical devices.
- 2.5 Maintenance and repair

The boatmaster shall be able to:

- organise the safe maintenance and repair of the craft and its equipment.
- 2.6 Communication

The boatmaster shall be able to:

- perform human resources management, be socially responsible, and take care of the organisation of workflow and training on board the craft;
- ensure good communication at all times, which includes the use of standardised communication phrases in situations with communication problems;
- foster a well-balanced and sociable working environment on board.
- 2.7 Health and safety, passenger rights and environmental protection

The boatmaster shall be able to:

- monitor the applicable legal requirements and take measures to ensure the safety of life;
- maintain safety and security for persons on board, including providing direct assistance to disabled persons and persons with reduced mobility in accordance with the training requirements and instructions of Annex IV of Regulation (EU) No 1177/2010;
- set-up emergency and damage control plans, and handle emergency situations;
- ensure compliance with requirements for environmental protection.
- 3 Essential competence requirements for specific authorisations
- 3.1 Sailing on inland waterways with a maritime character

The boatmaster shall be able to:

- work with up-to-date charts and maps, notices to skippers and mariners and other publications specific to waterways with a maritime character;
- use tidal datums, tidal currents, periods and cycles, the time of tidal currents and tides and variations across an estuary;
- use SIGNI (Signalisation de voies de Navigation Intérieure) and IALA (International Association of Marine Aids to Navigation and Lighthouse Authorities) for safe navigation on inland waterways with a maritime character.
- 3.2 Radar navigation

The boatmaster shall be able to:

- take appropriate action in relation to navigation with the aid of radar before casting off;
- interpret radar displays and analyse the information supplied by radar;
- reduce interference of varying origin;
- navigate by radar taking into account the agreed set of rules applicable to inland navigation and in accordance with the regulations specifying the requirements for navigating by radar (such as manning requirements or technical requirements for vessels);

- handle specific circumstances, such as density of traffic, failure of devices, dangerous situations.
- 4 Essential competence requirements for specific operations
- 4.1 Passenger navigation expert

Every applicant shall be able to:

- organise the use of life-saving equipment on board passenger vessels;
- apply safety instructions and take the necessary measures to protect passengers in general, especially in the event of emergencies (e.g. evacuation, damage, collision, running aground, fire, explosion or other situations which may give rise to panic), including providing direct assistance to disabled persons and persons with reduced mobility in accordance with training requirements and instructions of Annex IV of Regulation (EU) No 1177/2010;
- communicate in elementary English;
- meet the relevant requirements of Regulation (EU) No 1177/2010.
- 4.2 Liquefied natural gas (LNG) expert

Every applicant shall be able to:

- ensure compliance with legislation and standards applicable to craft that use LNG as fuel, as well as with other relevant health and safety regulations;
- be aware of specific points of attention related to LNG, recognise the risks and manage them;
- operate the systems specific to LNG in a safe way;
- ensure regular checking of the LNG system;
- know how to perform LNG bunkering operations in a safe and controlled manner;
- prepare the LNG system for craft maintenance;
- handle emergency situations related to LNG.

# ANNEX III

# ESSENTIAL REQUIREMENTS REGARDING MEDICAL FITNESS

Medical fitness, comprising of physical and psychological fitness, means not suffering from any disease or disability which makes the person serving on board a craft unable to:

- execute the tasks necessary to operate a craft;
- perform assigned duties at any time; or
- perceive their environment correctly.

The examination shall, in particular, cover visual and auditory acuity, motor functions, the neuro-psychiatric state and cardiovascular conditions.

#### ANNEX IV

# APPLICABLE REQUIREMENTS

# TABLE A

Subject matter, Article	<b>Conformity requirements</b>	Start of application
Practical examinations, Article 17(4)	[CESNI]	[]
Approval of simulators, Article 21(2)		
Characteristics and conditions of use of registers, Article 25(2)		

# TABLE B

Item	Essential competence requirement	Conformity requirements	Start of application
1	Essential competence requirements at operational level	[CESNI]	[]
2	Essential competence requirements for competences at management level		
3	Essential requirements for competence for specific authorisations		
3.1	Sailing on waterways with a maritime character		
3.2	Radar navigation		
4	Essential requirements for competence for specific operations		
4.1	Passenger navigation expert		
4.2	Liquefied natural gas (LNG) expert		

# TABLE C

Essential requirements regarding medical fitness	Conformity requirements	Start of application
Medical fitness examination	[CESNI]	[]

# (1) Regulation (EU) No 1177/2010 of the European Parliament and of the Council of 24 November 2010 concerning the rights of passengers when travelling by sea and inland waterway and amending Regulation (EC) No 2006/2004 (OJ L 334, 17.12.2010, p. 1).

(2) Directive (EU) 2016/1629 of the European Parliament and of the Council of 14 September 2016 laying down technical requirements for inland waterway vessels, amending Directive 2009/100/ EC and repealing Directive 2006/87/EC (OJ L 252, 16.9.2016, p. 118).