

# 2ND MEETING OF THE EXAM COMMISSIONS FOR PROFESSIONAL QUALIFICATIONS

## Examination at management level

**15.09.2021 (Online)**

*Birkhuber Bernd, Federal Ministry for Climate Action, AT*



# Content of the presentation

- 1. ES-QIN, Part I, Chapter 2,  
Standards for competence ML**
- 2. ES-QIN, Part II, Chapter 4 and 5,  
Standards for practical examination for  
obtaining a certificate of qualification ML**
- 3. Model examination ML**

# 01

## ES-QIN, Part I, Chapter 2 Standards for competence management level



# Legal background

- The essential competence requirements for the management level (boatmaster) are defined in Annex II of directive 2017/2397
- In accordance with Articles 17, 32 and 34 of the directive 2017/2397 CESNI has developed more detailed standards of competence for the management level which have been published as Part I Chapter 2 of ES-QIN
- These standards of competence have been adopted and published as Annex I, Chapter II, of Commission delegated directive (EU) 2020/12
- Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive by 17 January 2022 at the latest

# Chapter 0, Supervision

## Persons who have

- **completed an approved training programme based on the standards of competence for the operational level or**
- **passed an assessment of competence by an administrative authority aimed at verifying that the standards of competence for the operational level are met**

**only have to prove qualifications listed in Sections 1.1 to 7.4. All other persons additionally have to prove qualifications listed in Sections 0.1 to 0.7**

# Content

**As in the competence standards for the operational level ES-QIN is defining the necessary knowledge and skills for each competence of the boatmaster**

The boatmaster shall be able to:

COLUMN 1 COMPETENCE	COLUMN 2 KNOWLEDGE AND SKILLS
<ol style="list-style-type: none"> <li>1. respect the principles of inland waterway shipbuilding and construction;</li> </ol>	<ol style="list-style-type: none"> <li>1. Knowledge of importance and impact of craft dimensions and dimensions of inland waterway according to applicable rules.</li> <li>2. Ability to operate craft according to their dimensions and applicable construction legislation.</li> <li>3. Ability to supervise the compliance of craft with the applicable legislation taking into account construction work.</li> </ol>

# Knowledge and skills

In general the listed knowledge has to be checked in a theoretical examination and the listed skills have to be checked in a practical examination

The boatmaster shall be able to:

COLUMN 1 COMPETENCE	COLUMN 2 KNOWLEDGE AND SKILLS
1. understand functionalities of craft equipment;	1. Knowledge of mandatory equipment of the craft. 2. Ability to use and control all equipment in relation to their functionalities according to applicable legislation, and give instructions and supervise accordingly.

# Theoretical examination

- Theoretical exams to check the knowledge of a candidate can be organized as oral examinations or e.g. as multiple choice tests on paper or in electronic form
- CESNI has come to the conclusion that the development of a common database of multiple choice questions and common standards regarding the number of questions for an examination and the necessary success rate would contribute to a uniform level of examinations in Europe and a level playing field
- Such a database will however not be available in January 2022
- It is therefore up to the exam commissions to organize their theoretical exams, based on the table of competences



# 02

**ES-QIN, Part II, Chapter 4 and 5,  
Standards for practical  
examination for obtaining a  
certificate of qualification as a  
boatmaster**



# Legal background

- In accordance with Articles 17, 32 and 34 of the directive 2017/2397 CESNI has developed standards for practical examination for obtaining a certificate of qualification as a boatmaster which have been published as Part II Chapters 4 and 5 of ES-QIN
- These standards for practical examination have been adopted and published as Annex II, chapters IV and V, of Commission delegated directive (EU) 2020/12
- Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive by 17 January 2022 at the latest

# Parts of the practical examination

- The practical examination according to chapter 4 has to be passed by every candidate
- The practical examination according to chapter 5 is dealing with the module supervision and is only used for candidates without a qualification on operational level
- The practical examination comprises two parts: one on journey planning and, a second one, on journey execution
- The part journey planning can be done in an office, the part journey execution can only be done on a vessel or an approved simulator
- The craft used for a practical examination shall be covered by the scope of Directive (EU) 2017/2397 (Article 2)

# 03

## Model examination ML



# Legal background

- To provide the authorities with guidance on how the practical examination is to be conducted, the CESNI/QP working group decided to develop a model examination
- The model examination is not part of ES-QIN 2019 and will not be formalized as a directive or regulation of the EU
- Currently three documents:
  - CESNI/QP (21) 21 – Com. Sec.: Draft model examination
  - CESNI/QP (21) 26 – Com. AT: Suggestions for revising the model examination
  - CESNI/QP/QM (21) 48 – Com. DE: Summary and conclusions simulated voyage planning in Germany
- Feedback of the member states and especially the exam commissions is welcome

# Introduction to the model examination

- The model examination will be conducted on the assumption that the candidate has previously passed a theory examination
- The concluding practical examination will start with the journey planning part and will be followed by the journey execution part

# Part 1: journey planning

- **Written examination. Once the candidate has answered the questions, he may be asked oral questions about his answers and/or the contents of the examination**
- **The part “journey planning” should normally always contain:**
  - crossing a border
  - a lock
  - a bridge
  - a free-flowing stretch of river
  - a stretch without a current
- **The minimum sailing time for the journey to be planned should not be less than 72 hours**

# Part 1: journey planning

- The draft model examination is for a cargo vessel. If other types of vessels are used for an exam, the answers have to be adapted. Normally, however, the same questions should be used in each examination.
- No knowledge of stretches with specific risks can be demanded from the candidate. If route-specific knowledge is a topic, it shall be sufficient for the examination if the candidate can provide information on how to obtain this knowledge.
- The draft model examination does not cover all elements of the standard for practical examinations, but more than required. Each draft answer contains an indication of which elements it covers.



# Journey planning: aids made available

- The use of a (software) examination tool is possible. However, this tool must not relieve the candidate of the work involved in arriving at the solutions. The tool should make it possible to retrieve real-time information about the waterways in question (e.g. water levels, closures, restrictions on usability), for instance via an internet connection. If, however, a software tool is permitted, the candidate must also be allowed to use other sources for journey planning.
- The following documents relating to the vessel have to be provided to the candidate:
  - Union certificate, measurement certificate, safety rota
  - Police Regulations
  - Personnel regulations and working and resting time provisions of the countries affected (if available in the language of the country in which the examination is taking place)
  - map of the European waterways network including information on channel depths, bridge clearances and permissible dimensions or access to websites containing information on the European waterways network, but no journey planning tool

# Journey planning: sample solution

- From the questions in the model examination it is often not clear whether a short and very basic answer is sufficient or a detailed explanation is expected
- The sample solution provides an indication of the expected answers
- If the candidate does not provide the expected details in the written answer, more details can be asked in the oral part

# Journey execution

- The candidates must prove that they are in a position to execute a journey and operate the craft themselves
- The individual elements of the examination listed in the ES-QIN standard must all be tested
- For organizational and financial reasons and for reasons of repeatability, this part of the examination is preferably conducted on an approved inland navigation simulator
- If no suitable simulator is available, CESNI recommends to use a commercial craft with a length of 86 m as examination vessel
- The journey execution must include a locking operation or a bridge passage

# Journey execution: assessment

- Ideally two examiners
- The examiners will observe the candidate's abilities and may ask questions
- Assessment sheet with assessment criteria per element of the examination
- Each part of the examination will be awarded a number on a scale from 1 (poor) to 10 (excellent)
- If an element is awarded less than 7, the examiner must always make a note on the assessment form. At the end of this part of the examination, the assessment sheets will be collected from the individual examiners, and they will decide which candidates have passed
- The candidates should be requested to explain, if necessary, what they see or have to do. The examiner will word the question such that he can judge whether the candidate is making conscious decisions to act. The examiner will ask open questions so that the candidate has to give reasons for his answers and cannot just answer yes or no. The examiner will make a note of the questions asked.

# Journey execution: example

## 7. Appropriate response to problems during the voyage

Sub-elements	Number of points (1 to 10)
Response to failure of navigation components <sup>4</sup> :	_____
Managing failures during the voyage:	_____
Instructions to the crew:	_____
Taking decisions and action in connection with this incident:	_____
Off-craft communication:	_____

Additional (unanswered) questions on the capabilities demonstrated:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Final assessment of appropriate response to problems during the voyage:

# Conclusions model examination

- **CESNI is providing a model examination, that can still be improved**
  - **Exam commissions will have to develop their own questions for stretches in their area and for different vessels**
  - **CESNI will provide a set of vessel documents for the journey planning part. If exam commissions use different vessels, they will have to provide an own set of up to date vessel documents to the candidates**
- **First proposals for a revision have already been submitted with document CESNI/QP (21) 26**

# Suggestion 1 for revision

- “Normally, however, the same questions should be used in each examination”
- As the model examination does not contain all the elements of the standard for practical examinations in Directive (EU) 2020/12, this sentence could be interpreted to mean that elements 6, 7, 8, 12, 15, 17, 18, 19, 20, 21, 22, 24, 26, 27, 30, 32, 37, 39 and 40 should never be tested
- Should the sentence be deleted to avoid contradicting Directive (EU) 2020/12?

## Suggestion 2 for revision

- The sequence of individual questions is different to the sequence in the answers section
- The sequence of the answers is more logically structured
- Do you agree with the proposed response:  
The sequence of the individual questions should be aligned with the sequence of the answers.  
Furthermore, the question “Calculate the proper trim of the craft.” is not considered in the model answer and should therefore be deleted.



## Suggestion 3 for revision

- The sample solution refers to the solutions to questions a), b) etc as I., II. etc
- Do you agree with the proposed response:  
In order to be able to associate the solutions more quickly with the questions, it is proposed using the same numbering in (2) and (4) (i.e. in the questions and answers).

## Suggestion 4 for revision

- In sample solution I. the questions asked in (a) are broken into four blocks. The same goes for all other parts.
- Do you agree with the proposed solution:  
The link between questions in (2) and sample solutions in (4) would be even more obvious if for example the blocks in the sample solutions were numbered i), ii) and iii) and the same breakdown and numbering of the individual aspects were also used in (2).  
A clear link is imperative because when selecting questions for an actual examination and calculating the maximum mark for each question, it must be possible for practical examinations to take account of the association with the elements in the standard. But this association is only evident from the sample solutions. The proposed consistent numbering of the blocks associated with the elements would significantly facilitate the putting together of specific sample exam papers.

## Suggestion 5 for revision

- It is stated that the sample solution covers element 13, “compose stowage plans including knowledge of loading cargoes and ballast systems in order to keep hull stress within acceptable limits;”
- The sample solution does not contain the composition of a stowage plan
- Do you agree with the proposed solution:  
A stowage plan is not mentioned in the model answer. “and no. 13 (cat. 1)” should therefore be deleted.

## Suggestion 6 for revision

- The sample answer to “What maintenance or inspection of technical devices might you have to perform during the voyage?” also covers element no. 26 (cat. II):  
“define, monitor and ensure work orders so that crew members are able to perform maintenance and repair work independently;”
- Do you agree with the proposed solution:  
It should be added that no. 26 (cat. II) is also covered.



Thank you for your attention!

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