

## **Course “Navigation on smaller inland waterways” Curriculum | Management level:**

The course will offer several competencies to the students and advantages to the community by spreading awareness about the importance and use of smaller inland waterways in terms of environmental benefits, cost and time efficiency. Students will become capable of navigating in the smaller inland waterways efficiently.

Navigation is a broad topic and involves many skills. Therefore, the skills that students will learn from the other courses involved in this program will be useful for this training course as well. Such as: operation of the craft and communications.

The offerings of “smaller inland waterway navigation” training course will be different from the other courses taught in this program. Therefore, it is essential to mention that the training course is not a replacement of any other courses of the academic program, but it will upgrade students’ efficiency and will make them ready to deal with the difficult situations that might happen during sailing.

The objective of this course is Management level 1.1 (CP), which means making students capable of learning the competencies of how to navigate and work on inland waterways efficiently. The measurables are based on standard competencies of navigation and operation of the craft for the management level and standards of competence for alternative means of propulsion.

### The measurable learning outcomes are as following:

1. The boat-master 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.
2. The boat-master shall be able to apply knowledge of the applicable rules on the manning of craft, including knowledge on resting time and on deck crew members composition.
3. The boat-master shall be able to 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 of the European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (ADN).
4. The boat-master shall be able to respond to navigational emergencies on inland waterways.

### Detailed Course Description:

Small inland waterway navigation will be a 5 day training course. The course carries a total of >26 hours. Four days of training with a total 24 contact hours, which is consist of 12 hours of theory and 12 hours of practical training. 6.5 hours of examination, which will be consist of 45 minutes of practical exam (simulator) per student and 1.5 hours of theoretical exam (Multiple choice questions). Duration of practical is exam depends on the number of students (group size).

The topics that will be covered during this training program are mainly based on the standards of management level competencies such as; Navigation, Operation of the craft, communications, sailing with the aid of radar and expertise in alternative means of propulsion. For making it more concrete below is the timeline based course description.

**Day.1 (Monday):**

<b>Time-slot</b>	<b>Topics</b>	<b>Learning outcome</b>
Morning session 09:00 – 12:00	plan a journey and conduct navigation on inland waterways	The boat-master 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.
Lunch Break 12:00 – 13:00		
Afternoon Session 13:00 – 16:30	knowledge of the applicable rules on inland waterways	The boat-master shall be able to apply knowledge of the applicable rules on the manning of craft, including knowledge on resting time and on deck crew members composition

**Day.2 (Tuesday) total 6 hours:**

<b>Time-slot</b>	<b>Topics</b>	<b>Learning outcomes</b>
Morning session 09:00 – 12:00	sail and manoeuvre in all conditions on inland waterways	The boat-master shall be able to 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 of the European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (ADN)
Lunch Break 12:00 – 13:00		

Afternoon Session 13:00 – 16:30	respond to navigational emergencies on inland waterways	The boat-master shall be able to respond to navigational emergencies on inland waterways
------------------------------------	---	--

### Day.3 (Wednesday):

Time-slot	Topics	Learning outcomes
Morning session 09:00 – 12:00	Simulator	Application of theory in practice and upgrading of the sailing skills
Lunch Break 12:00 – 13:00		
Afternoon Session 13:00 – 16:30	Simulator	Application of theory in practice and upgrading of the sailing skills

### Day.4 (Thursday):

Time-slot	Topics	Learning outcomes
Morning session 09:00 – 12:00	Simulator	Application of theory in practice and upgrading of the sailing skills
Lunch Break 12:00 – 13:00		
Afternoon Session 13:00 – 16:30	Simulator	Application of theory in practice and upgrading of the sailing skills

### Day.5(Friday):

Time-slot	Activity
45 minutes each candidate	Practical exam (Simulator)
2 Lesson hours* 45 minutes (1.5 hours)	Theoretical exam (Multiple choice)

Duration of the practical exam is flexible/ Variable and it depends on the group size/number of the students. During the training course there will be a number of group and individual assessments that each student will be involved in.

Course required resources will be consist of Fully equipped classes with an e-learning. In case of need students will get handouts as well. Simulator center, laboratory equipment's and required training materials will be provided to the students for the practical work.