vocational education, training and the labour market
(beroepsonderwijs bedrijfsleven)

Qualification Dossier Senior Secondary Vocational Education
(MBO)

**Boatmen**

Central Register for Vocational Courses (Crebo) no. 22121

Qualifications
- Boatman Crebo no. 93030

Valid effective
1 August 2015

Course domain

Established by
the Dutch minister [of Education, Culture and Science/Economic Affairs] on 01/07/2014
Lead agency: Vakopleiding Transport en Logistiek (VTL)
Developed by: VTL, knowledge centre for Transport and Logistics
Legitimised by: the Board of Directors of the foundation KBB T and L, after having obtained advice from the joint committee for vocational education, training and the labour market (paritaire commissie beroepsonderwijs bedrijfsleven)
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Reader’s guide

This qualification dossier for senior secondary vocational education (MBO) sets out what a trainee must know and be able to do at the end of the MBO programme.

Structure of this dossier

This qualification dossier contains the qualification requirements for one or more MBO professions and consists of:

1. The basic module (B), which is formed by:
   a. The profession-specific modules. This concerns common core duties and work processes for the entire qualification dossier (possibly including supplementary requirements per subject cluster).
   b. The general modules. The general modules have been formulated by the central government. It concerns the modules:
      - Dutch language;
      - mathematics;
      - career and citizenship; and
      - insofar as it concerns level 4: English.

2. The subject cluster module (P). Subject clusters consist of core duties (K) and work processes (W) which differ from each other in terms of the qualifications set out in this qualification dossier.

The qualification dossier contains a reference to the elective modules (D). The elective modules increase an MBO student’s chances on the employment market or facilitate the transfer to an advanced programme. They form as it were a ‘plus’ on top of the diploma. As such, the elective modules are not part of the qualification requirements, but they are stated on the diploma.

[chart: MBO programme, Choice, Subject cluster, Basis, Qualification]

Language and Mathematics

The general requirements for language and mathematics are mentioned in the basic module. Profession-specific language and mathematics requirements are indicated in the column ‘professional knowledge and skills’. In addition, the column ‘conduct’ may provide an additional explanation as to how these profession-specific language and mathematics requirements are applied in a work process.

Accountability information

Additional accountability information on this qualification dossier can be found on www.kwalificatiesmbo.nl. That information is not part of the qualification dossier.
Overview of the qualification dossier

<table>
<thead>
<tr>
<th>Name subject cluster</th>
<th>MBO level (EQF level)</th>
<th>Statutory professional requirements</th>
<th>Characterisation of the qualification</th>
<th>Course duration for the qualification</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1 Boatman</td>
<td>3</td>
<td>Yes</td>
<td>vocational training</td>
<td></td>
</tr>
</tbody>
</table>

Basic module

The connection between the various subject clusters in this qualification dossier is found in the following profession-specific core duties and work processes:

<table>
<thead>
<tr>
<th>Subject cluster</th>
<th>Core duties and work processes</th>
</tr>
</thead>
<tbody>
<tr>
<td>B1-K1</td>
<td>Sees to the positioning, mooring, unmooring and shifting of seagoing ships/work boats</td>
</tr>
<tr>
<td></td>
<td>Maintains equipment</td>
</tr>
<tr>
<td></td>
<td>Positions seagoing ships/work boats</td>
</tr>
<tr>
<td></td>
<td>Moors seagoing ships/work boats</td>
</tr>
<tr>
<td></td>
<td>Unmoors seagoing ships/work boats</td>
</tr>
<tr>
<td></td>
<td>Shifts seagoing ships/work boats</td>
</tr>
<tr>
<td>B1-K2</td>
<td>Transports persons, goods and floating objects within the work area</td>
</tr>
<tr>
<td></td>
<td>Transports persons within the work area</td>
</tr>
<tr>
<td></td>
<td>Transports goods within work area</td>
</tr>
<tr>
<td></td>
<td>Guides divers in the event of diving operations</td>
</tr>
<tr>
<td></td>
<td>Tows and fastens floating objects</td>
</tr>
<tr>
<td>B1-K3</td>
<td>Works on board seagoing ships/work boats</td>
</tr>
<tr>
<td></td>
<td>During the mooring, unmooring and shifting of seagoing ships/work boats acts on board as crew</td>
</tr>
<tr>
<td></td>
<td>Conducts inspections and repairs on board seagoing ships/work boats</td>
</tr>
<tr>
<td></td>
<td>Steers the seagoing ship/work boat</td>
</tr>
<tr>
<td>B1-K4</td>
<td>Assists with the handling of emergencies/incidents</td>
</tr>
<tr>
<td></td>
<td>Assists with emergencies/incidents</td>
</tr>
<tr>
<td></td>
<td>Administers first aid during emergencies/incidents</td>
</tr>
<tr>
<td>B1-K5</td>
<td>Communicates with the relevant persons about the planning and safety</td>
</tr>
<tr>
<td></td>
<td>Consults with the relevant persons about the planning</td>
</tr>
<tr>
<td></td>
<td>Consults with the relevant persons about safety</td>
</tr>
</tbody>
</table>

Subject cluster section

The subject clusters in this qualification dossier consist of the following core duties and work processes:

<table>
<thead>
<tr>
<th>Subject cluster</th>
<th>Core duties and work processes</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1 Boatman</td>
<td>No additional core duties or work processes</td>
</tr>
</tbody>
</table>
Basic module

1. Profession-specific modules

<table>
<thead>
<tr>
<th>Characterisation of the professional group</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Context</strong></td>
</tr>
<tr>
<td>The boatman works in an organisation or association in a port area or navigation lock. This organisation provides assistance 24 hours per day to, <em>inter alia</em>, seagoing ships/work boats. The boatman functions in a continuous work shift, which means working in a roster with alternating day and night shifts. The boatman furthermore cooperates in a stand-by arrangement, under which he can be called to work for a number of extra hours in the event of a shortage of personnel. In this respect, the boatman works together with other nautical service providers such as pilot and tugboat organisations. The boatman performs his work on board and near seagoing ships/work boats. In that respect, he works in part from a boat/launch (hereinafter referred to as ‘craft’).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Characterisation of professional attitude</th>
</tr>
</thead>
<tbody>
<tr>
<td>The boatman must be in good physical and mental condition. He regularly works under pressure and difficult circumstances. In such situations he must be able to make decisions quickly to ensure his safety and that of others. He must possess adequate communication skills and must adapt his manner of communication to suit the recipient.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Result of the professional group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seagoing ships/work boats have been safely positioned, moored, unmoored and/or shifted to a shore, buoy, dolphin, slope, alongside seagoing ships/work boats and in navigation locks. Passengers, goods and floating objects have been transported safely and on time. Professional assistance has been provided in the event of emergencies/incidents.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>B1-K1: Sees to the positioning, mooring, unmooring and shifting of seagoing ships/work boats</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Complexity</strong></td>
</tr>
<tr>
<td>The boatman works in changing surroundings where he performs his work from the shore and/or from his craft. While performing his work, the boatman may come into contact with persons from other countries and/or cultures. When positioning, mooring, unmooring and shifting seagoing ships/work boats he anticipates the working method and the conduct of persons from other countries and/or cultures.</td>
</tr>
</tbody>
</table>

Positioning, mooring, unmooring and shifting seagoing ships/work boats consists of a variety of operations for which the boatman needs knowledge and skills. This in part concerns work where the boatman also cooperates on board seagoing ship/work boat. However, because of the other location where the boatman is positioned (i.e. from the shore and/or from his craft rather than on board a seagoing ship/work boat) the substance of his work is different.

The boatman applies a great number of complex standard procedures. If a situation so requires, he may deviate from the standard procedures. The boatman must in all cases select one or more procedures. The boatman must carry out these procedures properly.

The boatman recognises unsafe situations, acts alertly and notifies these situations to the pilot, captain, site manager and/or port authorities. At such a moment he must safeguard his own safety and that of others by choosing the best alternative route, place and working method.

During his work he acts at his own discretion taking into account the special circumstances, information obtained and/or instructions received from the helmsman, pilot, captain, site manager or lock keeper.

<table>
<thead>
<tr>
<th>Responsibility and self-reliance</th>
</tr>
</thead>
<tbody>
<tr>
<td>The boatman works independently and has an executive role. He fills an independent position in a team. He works together with colleagues and others but is responsible for carrying out his own range of duties with regard to positioning, mooring, unmooring and shifting seagoing ships/work boats. The boatman decides whether or not to carry out his duties based on the nautical circumstances and within the scope of his own responsibility.</td>
</tr>
</tbody>
</table>
**B1-K1: Sees to the positioning, mooring, unmooring and shifting of seagoing ships/work boats**

**Professional knowledge and skills**

A trainee:

- has knowledge of the relevant nautical laws and regulations
- has knowledge of the quality requirements applicable to equipment, mechanical devices and means of transport
- can use gestures in communication
- can use communication resources (mobile two-way radio system, telephone, VHF)
- can manoeuvre the craft in various circumstances
- can use maritime radio communication (Marcom B) in communications
- can act in accordance with the applicable port bye-laws
- can operate equipment, mechanical devices and means of transport
- can hold conversations about the work in the English language
- can read work-related documents drafted in the English language
- can fill in/write work-related documents in the English language
- can provide work-related information in the English language
- can understand English-speaking crew members

**B1-K1-W1: Maintains equipment**

**Description**

Before performing his work, the boatman will check the functioning of the communication resources and the presence and quality of the means of transport, equipment and mechanical devices needed. If necessary, the boatman will repair damage to and minor defects in this equipment and will report this to the planning department and/or technical department. He will report other damage/defects in writing to the planning department and/or the technical department. The boatman will clean the equipment and the devices attached to it if this proves necessary after inspection.

**Result**

The equipment has been well taken care of and is safe to use.

**Conduct**

Carefully inspects the functioning, presence and quality of the material needed.

Reports damage and minor defects accurately such that these can be repaired by others.

Uses the right materials and resources to repair and clean the equipment and the devices attached to it.

The underlying competencies are: Using materials and resources, Formulating and Reporting

**B1-K1-W2: Positions seagoing ships/work boats**

**Description**

When positioning vessels, the boatman explains to the captain, pilot and helmsman at what position the seagoing ship/work boat must come to lie. He will check whether the seagoing ship/work boat lies in the position designated by him.

**Result**

At the boatman’s instruction the seagoing ship/work boat has been safely positioned at the time and location agreed.

**Conduct**

Estimates the distance between the shore and the seagoing ship/work boat as accurately as possible from the craft or from the shore.
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B1-K1-W2: Positions seagoing ships/work boats

Positions the seagoing ship/work boat with due observance of the applicable quality requirements, safety/environmental regulations and laws and regulations.

At all times takes into account a safe escape route and the nautical circumstances when manœuvring the craft.

Anticipates the working method and the conduct of persons from other cultures, adapts his working method and conduct accordingly.

The underlying competencies are: Applying professional expertise, Following instructions and procedures, Dealing with change and adapting

B1-K1-W3: Moors seagoing ships/work boats

Description

When mooring vessels, the boatman manœuvres the craft in front of/behind the seagoing ship/work boat. He takes the mooring line length(s) needed along in the craft, secures it/them in the quick release/towing bitt and sails it/them to the shore, buoy, dolphin, slope or alongside seagoing ships/work boats where it/they will be secured. In that respect the boatman will secure as many mooring lines as desired by the captain, pilot, helmsman, site manager or lock keeper. He checks the quality of the mooring lines and gives advice in the event of doubt. The boatman moves the ship/boat that has sailed in by means of a mooring line offered by heaving line, by hand and/or mechanical devices to the shore, buoy, dolphin, slope or alongside seagoing ships/work boats, if necessary rolls out the mooring lines and secures the mooring lines to the bollards, whether or not at the instruction of the captain, pilot, helmsman, site manager or lock keeper.

Result

The seagoing ship/work boat has been moored safely and as agreed and can be unmoored regardless of the order of departure.

Conduct

At all times takes into account a safe escape route and the nautical circumstances when manœuvring the craft.

When unmooring and paying out the mooring lines chooses and uses the mechanical devices in the prescribed manner.

Moors the seagoing ship/work boat such that it can be unmoored regardless of the order of departure and checks the quality of the mooring lines.

Anticipates the working method and the conduct of persons from other cultures, adapts his working method and conduct accordingly.

Moors the seagoing ship/work boat at the agreed time and with due observance of the applicable safety and environmental regulations, laws and regulations.

The underlying competencies are: Collaborating and consulting, Applying professional expertise, Using materials and resources, Delivering quality, Dealing with changes and adapting, Following instructions and procedures

B1-K1-W4: Unmoors seagoing ships/work boats

Description

In the case of unmooring, the boatman from the shore and/or the craft unites the mooring lines at the instruction of the captain, pilot or helmsman from the shore, buoy, dolphin, slope or alongside the seagoing ships/work boats and
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pays them out. If necessary, he will use mechanical devices in this respect. The boatman puts the mooring line eye-slip hook used in the right position. In this respect he will check whether it is secured properly and ready for the next use.

**B1-K1-W4: Unmoors seagoing ships/work boats**

**Result**

The seagoing ship/work boat has been unmoored safely and in accordance with instructions.

**Conduct**

At all times takes into account in mind a safe escape route and the nautical circumstances when manoeuvring the craft.

When untying and paying out the mooring lines chooses and uses the mechanical devices in the prescribed manner.

Unmoors the seagoing ship/work boat within the scope of the applicable requirements and in accordance with instructions.

Anticipates the working method and the conduct of persons from other cultures and adapts his working method and conduct accordingly.

Unmoors the seagoing ship/work boat at the instruction of the captain, pilot or helmsman at the agreed time and within with the scope of the applicable safety and environmental regulations, laws and regulations.

The underlying competencies are: Collaborating and consulting, Applying professional expertise, Using materials and resources, Delivering quality, Following instructions and procedures, Dealing with change and adapting

**B1-K1-W5: Shifts seagoing ships/work boats**

**Description**

During the shifting of vessels, the boatman from the shore and/or the craft unties some of the mooring lines at the instruction of the captain, pilot, helmsman, site manager or lock keeper, moves the mooring lines from bollard to bollard and secures them to the bollard. In this respect he uses the craft and mechanical devices, such as a tractor or winch truck on the shore.

**Result**

The seagoing ship/work boat has been shifted safely and as instructed.

**Conduct**

At all times takes into account a safe escape route and the nautical circumstances when manoeuvring the craft and when moving the mooring lines from bollard to bollard from the craft or from the shore.

When untying and moving the mooring lines, chooses and uses the mechanical devices in the prescribed manner.

Shifts the seagoing ship/work boat within the scope of the applicable quality requirements, safely and as instructed.

Anticipates the working method and the conduct of persons from other cultures, adapts his working method and conduct accordingly.

Shifts the seagoing ship/ work boat at the instruction of the relevant persons, at the agreed time and within the scope of the applicable safety and environmental regulations, laws and regulations.

The underlying competencies are: Collaborating and consulting, Applying professional expertise, Using materials and resources, Delivering quality, Following instructions and procedures, Dealing with change and adapting
### B1-K2: Transports persons, goods and floating objects within the work area

#### Complexity

The boatman works in changing surroundings where he performs his work from the shore and/or from his craft. While performing his work the boatman may come into contact with persons from other countries and/or cultures. When transporting persons within the work area he anticipates the working method and the conduct of persons from other countries and/or cultures.

The boatman needs knowledge and skills to perform the transport work. For example, the boatman must in the case of transport take into account the stowage plan, the stability of the work boat and relevant laws and regulations. The boatman applies a great number of complex standard procedures. If the situation so requires, he may deviate from the standard procedures. The boatman must in all cases select one or more procedures. The boatman must carry out these procedures properly.

The boatman recognises unsafe situations, acts alertly and reports them to the pilot, captain, site manager and/or port authorities. At such a moment he must ensure his own safety and that of others by selecting the best alternative route, place and working method.

During his work he acts at his own discretion and in that respect takes into account the special circumstances, information obtained and/or instructions received, especially from the client.

#### Responsibility and self-reliance

The boatman has an executive role. In the event of transport of persons, the boatman generally works entirely independently and in the event of transport of goods he works independently or in a team. When the boatman works together with colleagues and others, he remains responsible for carrying out his own range of duties with regard to transporting persons, goods and floating objects. If the boatman transports divers, he also has a guiding role in respect of these divers. The boatman decides whether or not to carry out his duties based on the nautical circumstances and within the scope of his own responsibility.

#### Professional knowledge and skills

The trainee:
- has knowledge of the relevant nautical laws and regulations
- has knowledge of the ISPS Code
- can use gestures in communication
- can use communication resources (mobile two-way radiosystem, telephone, VHF)
- can manoeuvre the craft in various circumstances
- can use maritime radio communication (Marcom B) in communications
- can act in accordance with the applicable port bye-laws
- can navigate using radar and rate of turn indicator (Radar Certificate)
- can apply the rules under the European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
- can hold conversations about the work in the English language
- can read work-related documents drafted in the English language
- can fill in/write work-related documents in the English language
- can provide work-related information in the English language
- can understand English-speaking crew members

### B1-K2-W1: Transports persons within the work area

#### Description

The boatman picks up and/or drops off persons from/at the seagoing ship/work boat and/or the berth. He communicates with the client about dropping off and picking up persons. He transports the persons from and to seagoing ships/work boats without a connection to the shore (moored on stream or sailing). In the event of transport,
the boatman gives safety instructions to the persons he transports and, where applicable, checks whether the transport documents needed are available.

<table>
<thead>
<tr>
<th>B1-K2-W1: Transports persons within the work area</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Result</strong></td>
</tr>
<tr>
<td>The passengers have been transported on time and safely from A to the agreed location (B) and embarked and disembarked safely. The transport documents have been checked.</td>
</tr>
<tr>
<td><strong>Conduct</strong></td>
</tr>
<tr>
<td>Consults with the client in a timely fashion about dropping off and picking up persons.</td>
</tr>
<tr>
<td>Manoeuvres the craft such that the passengers can embark and disembark safely and in this respect takes into account the stowage plan, the stability of the craft and the nautical circumstances.</td>
</tr>
<tr>
<td>Acts in accordance with the requirements imposed with regard to the transport of persons and does everything in his power to ensure that the transport of persons is carried out on time, calmly, safely and correctly.</td>
</tr>
<tr>
<td>Transports passengers with due observance of the applicable safety and environmental regulations, laws and regulations.</td>
</tr>
<tr>
<td>Checks the transport documents in accordance with the rules.</td>
</tr>
<tr>
<td>Communicates the safety instructions to the persons to be transported in a clear and coherent manner, if necessary in the English language.</td>
</tr>
</tbody>
</table>

The underlying competencies are: Collaborating and consulting, Applying professional expertise, Delivering quality, Following instructions and procedures.

<table>
<thead>
<tr>
<th>B1-K2-W2: Transports goods within the work area</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description</strong></td>
</tr>
<tr>
<td>The boatman delivers goods to or picks goods up from the seagoing ship/work boat and/or the berth. He communicates with the client about the unloading and/or loading station and the goods to be transported. He loads and/or unloads the goods. In doing so he uses the hoisting resources available. The boatman transports goods from and to seagoing ships/work boats without a connection to the shore (moored on stream or sailing). In the case of transport, the boatman checks whether the transport documents relating to the goods are present.</td>
</tr>
<tr>
<td><strong>Result</strong></td>
</tr>
<tr>
<td>The goods were delivered at the agreed location on time and were safely loaded and unloaded. The transport documents were checked.</td>
</tr>
<tr>
<td><strong>Conduct</strong></td>
</tr>
<tr>
<td>Consults with the client in a timely fashion about the loading and/or unloading station of the goods to be transported.</td>
</tr>
<tr>
<td>When manoeuvring the craft takes into account the stowage plan, the stability of the craft and the nautical circumstances.</td>
</tr>
<tr>
<td>Safely loads and/or unloads the goods.</td>
</tr>
<tr>
<td>Safely uses the available hoisting resources.</td>
</tr>
</tbody>
</table>
Qualification dossier for boatmen

Acts in accordance with the requirements imposed with regard to the transport of goods and does everything in his power to transport the goods on time, safely and correctly.

Transports goods within the scope of the applicable safety and environmental regulations, laws and regulations.

Checks the transport documents in accordance with the rules.

The underlying competencies are: Collaborating and consulting, Applying professional expertise, Using materials and resources, Delivering quality, Following instructions and procedures

### B1-K2-W3: Guides divers in the event of diving operations

**Description**

The boatman transports divers and their equipment to the agreed location. At the dive site the boatman sees to it that the craft remains at the location or he moors the craft at the designated location, for example to a buoy or with the aid of an anchor. Using nautical signs, the boatman indicates that diving operations are being carried out.

The boatman performs the notification duty (to the port authorities), he informs them about the commencement and end of the diving operations and checks compliance with the regulations (permits). He guards the safety of the divers by monitoring the other maritime traffic and warning when they get too close. The boatman takes into account currents and weather conditions and advises the divers on these matters. The boatman provides the necessary on-board assistance to the divers.

**Result**

The diving operations have been carried out on time and safely.

**Conduct**

Follows the divers’ instructions when providing on-board assistance.

When manoeuvring and mooring the craft, takes into account the stowage plan, the stability of the craft and the nautical circumstances.

Using nautical signs clearly indicates that diving operations are being carried out and warns other maritime traffic when they come too close.

Acts in accordance with the requirements imposed with regard to guiding divers in the case of diving operations and does everything in his power to carry out this guidance on time, safely and properly.

Guides divers at the agreed time and within the scope of the applicable safety and environmental regulations, laws and regulations.

The underlying competencies are: Collaborating and consulting, Applying professional expertise, Delivering quality, Following instructions and procedures

### B1-K2-W4: Tows and fastens floating objects

**Description**

The boatman uses his craft to tow floating objects to an agreed location. When towing floating objects, the boatman fastens the object to the craft. He secures the object and in consultation with the recipient also places the fenders. After the towing, the boatman fastens the object at the agreed location.
**Result**

The floating object has been towed, secured and fastened at the agreed location on time, safely and without damage.

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**Conduct**

Coordinates with the recipient where he must place the fenders.

Takes into account the nautical circumstances when manoeuvring the craft.

Acts in accordance with the requirements imposed with regard to towing, securing and fastening floating objects/items and does everything in his power to carry out this work on time, safely and correctly.

Tows and secures floating objects/items at the agreed time and within the scope of the applicable safety and environmental regulations, laws and regulations.

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**B1-K2-W4: Tows and fastens floating objects**

The underlying competencies are: Collaborating and consulting, Applying professional expertise, Delivering quality, Following instructions and procedures.
B1-K3: Works on board seagoing ships/work boats

Complexity

The boatman works in changing surroundings on board seagoing ships/work boats and during his work he may come into contact with persons from other countries and/or cultures. When working as crew on board seagoing ship/work boat he anticipates the working method and conduct of persons from other countries and/or cultures.

Work on board seagoing ships/work boats consists of a variety of duties. It concerns work in which the boatman aids from the shore and/or from his craft. However, because of the other location where the boatman is positioned (i.e. on board seagoing ship/work boat rather than from the shore and/or from his craft) the substance of his work is different. The boatman needs knowledge and skills to work on board seagoing ship/work boat. For example, when steering, the boatman must take into account a variety of factors: buoying, the location of sand banks and obstacles, the tide, the passing of other seagoing ships/work boats, the passing of engineering structures (bridges and locks), sailing in a (narrow) canal and sailing into a port. The boatman applies a great number of complex standard procedures. If the situation so requires, he may deviate from the standard procedures. The boatman must in all cases select one or more procedures. The boatman must carry out these procedures properly.

The boatman recognises unsafe situations, acts alertly and reports these situations to the pilot, captain, site manager and/or port authorities. At such a moment he must ensure his own safety and that of others by choosing the best alternative.

The circumstances under which the boatman must work differ per seagoing ship/work boat.

Responsibility and self-reliance

The boatman conducts executive work independently within a team (the crew of the seagoing ship/work boat). When working on a seagoing ship/work boat the boatman works under the supervision of the captain or the pilot. The captain bears responsibility for the affairs. The boatman decides whether or not to carry out his duties based on the nautical circumstances and within the scope of his own responsibility.

Professional knowledge and skills

The trainee:
- has knowledge of the relevant nautical laws and regulations
- has knowledge of the ISPS Code
- can use gestures in communication
- can use communication resources (mobile two-way radiosystem, telephone, VHF)
- can use maritime radio communication (Marcom B) in communications
- can act in accordance with the applicable port bye-laws
- can navigate using radar and rate of turn indicator (Radar Certificate)
- can apply the rules under the European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
- can apply rope work techniques
- can hold conversations about the work in the English language
- can read work-related documents drafted in the English language
- can fill in/write work-related documents in the English language
- can provide work-related information in the English language
- can understand English-speaking crew members

B1-K3-W1: During the mooring, unmooring and shifting of seagoing ships/work boats acts on board as crew.

Description

During the mooring, unmooring and shifting of a seagoing ship/work boat the boatman acts on board as crew. When embarking/disembarking the boatman checks the gangway/pilot ladder. The boatman conducts, *inter alia*, the following work on board during the mooring, unmooring and shifting: whether or not at the instruction of the captain, pilot or the tugboat captain: veering in or paying out the mooring lines, looking for, preparing and checking mooring lines, inspecting and operating the winches and anchor capstan.
**B1-K3-W1: During the mooring, unmooring and shifting of seagoing ships/work boats acts on board as crew**

The boatman cooperates in securing and unmooring tugboats to and from the seagoing ship/work boat (clamping and unclamping) and assists with the (alongside) mooring and unmooring of the seagoing ship/work boat. In this connection the boatman hangs up fenders and wood fenders and sees to it that the mooring lines, runners and steel wires are kept taut in the case of changing water levels. If necessary, the boatman advises the captain, pilot or the tugboat captain about the positioning of the seagoing ship/work boat.

**Result**

During the mooring, unmooring and shifting of seagoing ships/work boats the boatman has acted on board as a fully-fledged crew member.

**Conduct**

Consults with the crew present about the performance of the work and the rules applicable on board the seagoing ship/work boat.

Does a variety of work on board the seagoing ship/work boat as a fully-fledged crew member and in doing so demonstrates endurance, physical and mental power.

Acts in accordance with the quality requirements applicable to mooring, unmooring and shifting of the seagoing ship/work boat and does everything in his power to perform his work on time, safely and properly.

Anticipates the working method and conduct of persons from other cultures, adapts his working method and conduct accordingly.

Moors, unmoors and shifts seagoing ships/work boats within the scope of the applicable safety and environmental regulations, laws and regulations.

Follows the instructions of the captain, pilot or the tugboat captain.

The underlying competencies are: Collaborating and consulting, Applying professional expertise, Delivering quality, Following instructions and procedures, Dealing with change and adapting

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**B1-K3-W2: Conducts inspections and repairs on board seagoing ships/work boats**

**Description**

The boatman conducts inspections and repairs on board seagoing ships/work boats as crew. Whether at the instruction of the captain, pilot or the tugboat captain or otherwise he performs, *inter alia*, the following work: makes the seagoing ship/work boat ready for sail, checks the deck lighting and rigging, checks navigation lights and, if necessary, repairs knots, splices, whippings and hitches.

**Result**

The boatman has conducted inspections and repairs on board the seagoing ship/work boat on time and safely.

**Conduct**

Consults with the crew present about the work to be carried out and the rules applicable on board the seagoing ship/work boat.

Conducts inspections and repairs on board the seagoing ship/work boat and in an adequate manner.

Acts in accordance with the quality requirements imposed by the organisation concerning the performance of inspections and repairs and does everything in his power to perform the work properly and correctly in one attempt.
Qualification dossier for boatmen

<table>
<thead>
<tr>
<th>B1-K3-W2: Conducts inspections and repairs on board seagoing ships/work boats</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description</strong></td>
</tr>
<tr>
<td>Follows the instructions of the captain, pilot or the tugboat captain.</td>
</tr>
<tr>
<td>The underlying competencies are: Collaborating and consulting, Applying professional expertise, Delivering quality, Following instructions and procedures</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>B1-K3-W3: Steers the seagoing ship/work boat</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description</strong></td>
</tr>
<tr>
<td>The boatman steers the seagoing ship/work boat under the supervision (at helm commands) of the captain and/or the pilot within the work area to its place of destination or from the berth back to the open fairway. In that connection he follows the steering and other instructions of the captain and the pilot. He answers questions of the captain and/or the pilot about circumstances within the work area and maintains contacts with tugboats and navigation support services on shore. In cases of emergencies the boatman steers the seagoing ship/work boat independently while maintaining the necessary contact with the tugboats that are assisting the seagoing ship/work boat and the navigation support services on shore.</td>
</tr>
<tr>
<td><strong>Result</strong></td>
</tr>
<tr>
<td>The seagoing ship/work boat has arrived safely at its place of destination or open fairway.</td>
</tr>
<tr>
<td><strong>Conduct</strong></td>
</tr>
<tr>
<td>When steering the seagoing ship/work boat (under supervision) the boatman takes into account various factors which cannot be influenced. He acts in accordance with the quality requirements imposed by the organisation concerning the steering of the seagoing ship/work boat (under supervision) and does everything in his power to do so properly and correct in one attempt. Closely follows helm commands issued by the captain and the pilot, while taking into account various factors. Works within the scope of the applicable safety and environmental regulations, laws and regulations. Anticipates the working method and the conduct of persons from other cultures, adapts his working method and conduct accordingly. The underlying competencies are: Applying professional expertise, Delivering quality, Following instructions and procedures</td>
</tr>
</tbody>
</table>
### Complexitv

The boatman works in changing surroundings in which he mainly does work from his craft.

In the event of various emergencies and incidents (for example oil leakages or seagoing ships/work boats that have come unmoored) the boatman must have knowledge and skills. In the event of emergencies and incidents the boatman must, in principle, follow the standard procedures as much as possible. The boatman must in all cases select one or more procedures. However, often hectic and complicated situations occur in which he must assess the risks and make decisions quickly. Complicating factors in this regard include the presence of hazardous substances and the possibility of fire and/or explosion. Persons may be the victims of an accident.

During the (often unpredictable) work he acts quickly and at his own discretion, taking into account the special circumstances, information obtained and/or instructions received from, in particular, port authorities. In the event of emergencies and incidents the boatman must often solve problems and improvise.

### Responsibility and self-reliance

The boatman works independently and has an executive role. The boatman fills an independent position in a team. He works together with colleagues and others.

### Professional knowledge and skills

The trainee:
- has knowledge of the relevant nautical laws and regulations
- has knowledge of the ISPS Code
- can use gestures in communication
- can use communication resources (mobile two-way radio system, telephone, VHF)
- can manoeuvre the craft in various circumstances
- can use maritime radio communication (Marcom B) in communications
- can act in accordance with the applicable port bye-laws
- can navigate using radar and rate of turn indicator (Radar Certificate)
- can apply the rules under the European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
- can hold conversations about the work in the English language
- can read work-related documents drafted in the English language
- can fill in/write work-related documents in the English language
- can provide work-related information in the English language
- can understand English-speaking crew members

### Description

The boatman assists in the event of various emergencies/incidents in his work area. In the event of an oil leakage the boatman takes oil booms and transports them with the craft. After that the boatman puts out the oil booms and places them around the oil-slick. After the incident has ended, he tows the booms back and tidies them away after they have been cleaned by another company. In consultation with the pilot/tugboats and others present, the boatman shifts and moors a seagoing ship/work boat that has come unmoored. In the event of accidents the boatman transports persons and goods that are needed on the scene. The boatman takes well-considered decisions and risks when assisting with any and all emergencies/incidents.

### Result

The boatman has appeared quickly on the scene with the necessary persons and goods and has provided the necessary assistance in the event of emergencies/incidents.

### Conduct

Takes well-considered risks and takes the necessary clear decisions on time.

Takes into account the nautical circumstances and a safe escape route when manoeuvring the craft (possibility with oil booms, persons and/or goods).
B1-K4-W1: Assists in the event of emergencies/incidents

Transports oil booms, sails them out, places them, tows them away and tidies them away within the scope of the imposed quality requirements.

Demonstrates a good sense of direction and estimates distances well when manoeuvring a seagoing ship/work boat that has come unmoored.

Shifts and moors seagoing ships/work boats that have come unmoored within the scope of the imposed quality requirements.

Adequately and quickly transports persons and goods from and to accidents within the scope of the imposed quality requirements.

Continues to perform and act quickly and accurately in the event of emergencies/incidents.

In the event of emergencies/incidents assists within the scope of the applicable safety and environmental regulations, laws and regulations and prescribed procedures.

The underlying competencies are: Collaborating and consulting, Applying professional expertise, Delivering quality, Following instructions and procedures, Coping with pressure and setbacks

B1-K4-W2: Administers first aid during emergencies/incidents

Description

The boatman administers first aid during emergencies/incidents. If necessary, he applies rescue swimming.

Result

The persons involved in the emergencies/incidents have received first aid if necessary.

Conduct

Acts at his own initiative in the event of emergencies/incidents.

Does not walk away from difficult situations and makes the decision to provide help on time.

Continues to perform effectively in the event of emergencies/incidents.

Quickly and adequately administers first aid to those concerned.

The underlying competencies are: Making decision and instigating activities, Coping with pressure and setbacks, Applying professional expertise
Quality dossier for boatmen

B1-K5: Communicates with the relevant persons about the planning and safety

**Complexity**

The boatman works in changing surroundings (from the shore, from the craft, on board a seagoing ship/work boat) in which respect he must at various times communicate with various persons (such as the planning department, crew members, helmsmen, pilots, captains, site managers, lock keepers and port and other authorities) about the planning/efficiency and his safety and that of others. The communication process consists of a variety of activities for which the boatman needs knowledge and skills.

In this respect, the boatman applies a great number of complex standard procedures. If the situation so requires, he may deviate from the standard procedures. The boatman must in all cases select one or more procedures. The boatman must carry out these procedures properly. Factors that require adjustment of these procedures and require that decisions be made include the nautical circumstances within the work area and the prevention of emergencies/incidents.

He communicates with the relevant persons at his own discretion, taking into account the special circumstances, information obtained and/or instructions from the various persons concerned.

**Responsibility and self-reliance**

The boatman works independently and has an executive role. He fills and independent position in a team. He works together with colleagues and others but is responsible for the correct communication with regard to his own duties.

**Professional knowledge and skills**

The trainee:
- has knowledge of the guidelines/relevant regulations in the field of safety and environment
- can use gestures in communication
- can use communication resources (mobile two-way radio system, telephone, VHF)
- can use maritime radio communication (Marcom B) in communications
- can act in accordance with the applicable port bye-laws
- can hold conversations about the work in the English language
- can read work-related documents drafted in the English language
- can fill in/write work-related documents in the English language
- can provide work-related information in the English language
- can understand English-speaking crew members

B1-K5-W1: Consults with the relevant persons about the planning

**Description**

Prior to conducting all his executive work, the boatman consults with the planning department about carrying out the planning/the work taken on and about the time needed for that work. While conducting his work, the boatman communicates with the planning department about realising the previously established planning and about the possibilities of a potential next trip/a potential next job. After conducting the activities, the boatman will contact the planning department and will receive information about the next trip/the next job or will return to the office.

Prior to and while performing his work the boatman also consults with other relevant persons (for example crew members, helmsmen, pilots, captains, site managers, lock keepers and port and other authorities) about the planning of his own work and possibly the work of other relevant persons. The boatman will in all cases ask questions to seek clarification of the work to be performed.

**Result**

The boatman has had insight into the planning of his own work and has coordinated his own planning with (the planning of) any other persons concerned.

**Conduct**
Qualification dossier for boatmen

Informs the planning department promptly and concisely about the possibilities surrounding the planning (and realising the planning) and concerning the acceptance of a potential next trip/a next job.

**B1-K5-W1: Consults with the persons concerned about the planning**

Asks others at the right times about matters concerning the planning of the work and reports these matters at the right times.

Makes his own good estimation as to when and with whom to communicate about the planning.

The underlying competencies are: Making decisions and instigating activities, Collaborating and consulting, Presenting, Applying professional expertise

**B1-K5-W2: Consults with relevant persons about safety**

*Description*

Prior to and while performing his work, the boatman consults with various relevant persons (for example crew members, helmsmen, pilots, captains, site managers, lock keepers and port and other authorities) about his safety and that of the other relevant persons. The boatman asks the relevant persons questions to gain an understanding of his safety and that of others. If all safety requirements are not satisfied, the boatman communicates with the persons concerned as to what measures must be taken.

*Result*

The boatman has contributed to optimal safety for himself and for any other persons concerned.

*Conduct*

Informs the relevant persons promptly and concisely about safety aspects.

Asks others at the right times about safety matters and reports these matters at the right times.

Continues to communicate clearly about safety aspects in the event of emergencies/incidents.

Makes his own good estimation as to when and with whom to communicate about safety.

The underlying competencies are: Making decisions and instigating activities, Collaborating and consulting, Presenting, Dealing with pressure and setbacks, Applying professional expertise
2. General modules

In addition to profession-specific qualification modules, each qualification also consists of general qualification modules.

**Dutch language**

The general qualification module 'Dutch language' is part of each qualification in this qualification dossier. The reference levels and the qualification requirements for this general module are listed in annex 1 to the Decree on Reference Levels for Dutch Language and Mathematics (*Besluit referentieniveaus Nederlandse taal en rekenen*). This annex can be found on www.kwalificatiesmbo.nl and forms an integral part of the qualification dossier.

It concerns the following reference levels:

a. for basic qualifications and for qualifications on levels 2 and 3: 2F;
b. for qualifications on level 4: 3F.

**Mathematics**

The general qualification module 'Mathematics' is part of each qualification in this qualification dossier. The reference levels and the qualification requirements for this general module are listed in annex 2 to the Decree on Reference Levels for Dutch Language and Mathematics. This annex can be found on www.kwalificatiesmbo.nl and forms an integral part of the qualification dossier.

It concerns the following reference levels:

a. for basic qualifications and for qualifications on levels 2 and 3: 2F;
b. for qualifications on level 4: 3F.

**Career and citizenship**

The general qualification module ‘Career and citizenship’ is part of each qualification in this qualification dossier. The qualification requirements for this general module are listed in annex 1 to the Decree on Exams and Qualifications for Vocational Training – Adult and Vocational Education Act (*Examen- en kwalificatiebesluit beroepsopleidingen WEB*). This annex can be found on www.kwalificatiesmbo.nl and forms an integral part of the qualification dossier.
Subject cluster module

<table>
<thead>
<tr>
<th>P1 Boatman</th>
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</table>

**MBO level**

3

**Characterisation of the profession**

**Statutory professional requirements**

Yes

**Notes on statutory professional requirements**

Inland Navigation Act (*Binnenvaartwet*) and the related Inland Navigation Regulations (*Binnenvaartregeling*) article 7.12 and annex 7.2, section 1, part 1.1 of the Inland Navigation Regulations:
(Source: Ministry of Infrastructure and the Environment)

Maritime phone, Marcom B, European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways, ISPS Code of 01/01/2005, Radar Certificate, Radar Certificate for Inland Navigation Regulations (*regeling radarpotent binnenvaart*), three years of sailing time within the boatman programme (1 sailing year is 180 days).

**Source statutory professional requirements**

Infrastructure & Environment

**Branch of industry requirements**

Yes

**Notes on branch of industry requirements**

First-aid diploma, swimming skills A, Safety, Health and Environment Checklist Contractors (VCA)
Elective modules

At least two elective modules (D) are linked to each subject cluster. The MBO student must choose at least one of the elective modules offered.

The elective module increases the MBO student’s chances on the employment market or facilitates the transfer to an advanced programme. It forms as it were a ‘plus’ on top of the diploma. As such, the elective module is not part of the qualification requirements.

The elective modules available for this qualification dossier can be found on www.kwalificatiesmbo.nl. An overview of all elective modules linked to qualifications can also be found on that website.