

Pilotage in Sweden

Training material



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Civil Aviation and Maritime Department Infrastructure Unit Ship Traffic Section

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Introduction

This training material contains all you need to know about the Swedish compulsory pilotage system. The material will also help you find out what will determine if, as the master of a vessel, you're required to engage a pilot or not.

As from 1 December 2023, new regulations on pilotage apply in



Sweden. The purpose of this material is to explain relevant parts of those regulations. The title of the regulations is the Swedish Transport Agency's Regulations and General Advice (TSFS 2022:94) on Pilotage. From now on, we'll refer to them as "the pilotage regulations". The complete pilotage regulations (in Swedish only) are found on the Swedish Transport Agency's website. On our website, you'll also find the Pilotage Guide, a tool that allows you to find out – by answering a number of questions – whether or not you need to engage a pilot for your call.

We've developed this training material to support those preparing for our online test, and to some extent the content is also covered by the theoretical examination for a pilot exemption certificate. But the material is also intended as a source of information for those who wish to find out more about compulsory pilotage and the process relating to pilot exemption certificates in Sweden. If you hold a pilot exemption certificate (PEC), this material may also be of use when you use your PEC in Swedish fairways. The last section of the material contains useful tips and advice to help you find local information about the fairway or the area — information that may be necessary when planning a call.

Also, we strongly recommend that masters who are not required to engage a pilot study this material. As a master, you're always ultimately responsible for the vessel, which means that you'll always have the right to engage a pilot if you consider it necessary in order to maintain maritime safety or the protection of the environment.

What's what in pilotage?

Find below a list of expressions that you'll encounter in this training material. The meanings of the expressions are listed to the right.

towed unit a craft or object that is being moved and that

lacks or does not use its own propulsion

tug and tow a combination of a tug and one or more

towed units

vessel a craft that has its own propulsion and

manoeuvrability, and that can be used for transport on the water; includes *pusher tug*

combination

vessel underway a vessel that is not at anchor, not moored to

land and not aground 1

risk level of the

vessel

a value established on the basis of an assessment of a *vessel's* cargo and design, and of the volume and placement of its fuel

oil

appointed pilot a pilot, appointed by the Swedish Maritime

Administration after consulting with the Swedish Transport Agency, for conducting theoretical and practical examinations for

PECs

informational passage

pilotage during which a pilot shares experience-based information about the fairway and local traffic and also, when

relevant, information about procedures and knowledge requirements relating to the

examination for a *PEC*

bridge book full documentation which has been prepared

for a specific vessel in combination with a designated pilotage fairway or an area, and which shows how to safely navigate the

vessel in that fairway or area

PEC (pilot exemption certificate) a master's

personal exemption from compulsory pilotage; can also be granted to other nautical officers, but may in that case only be used if the master has been granted an equivalent

exemption

designated pilotage fairway

fairway between the places stated in annex 1 to the pilotage regulations and also between such a fairway and an adjacent port, quay,

point of loading or anchorage

¹ Corresponding to the Convention on the International Regulations for Preventing Collisions at Sea, 1972 (COLREGs), regulation 3 i.

compulsory pilotage line

straight line through two given points which shows where compulsory pilotage starts or ceases to apply, as the case may be, in a designated pilotage fairway; the length of the line corresponds to the designated pilotage fairway's entire navigable width for the vessel or the tug and tow concerned, unless the width is bounded by one or more other compulsory pilotage lines

risk level of the designated pilotage fairway a value established on the basis of an assessment of the navigation difficulty, environmental vulnerability and accessibility of a designated pilotage fairway

pilotage

navigation and manoeuvring instructions given and monitored by a pilot in a designated pilotage fairway, which are required for the safe navigation of the vessel or the tug and tow

pusher tug combination

vessel consisting of a rigidly connected combination of a pusher tug and a pushed unit

temporary PEC

PEC valid for a specific passage or a limited

period

total risk level

the sum of the risk level of the vessel and the risk level of the designated pilotage fairway

Two public authorities – shared responsibility

The responsibility for pilotage-related matters in Sweden is shared between the Swedish Transport Agency and the Swedish Maritime Administration. When it comes to PECs, these public authorities cooperate, but it's still important to know what their respective areas of responsibility are.



The Swedish Transport Agency establishes regulations on compulsory pilotage and PECs. This means that we determine which areas and which vessels and vessel combinations are covered by compulsory pilotage.

You can get in touch with us during office hours.

Find us here:

Shipping (transportstyrelsen.se)

Send us an e-mail or call us on:

pec@transportstyrelsen.se

+46 (0)771-503 503



The Swedish Maritime Administration is responsible for all pilotage operations in Sweden, which means that all Swedish pilots are employed by that authority. The Swedish Maritime Administration is also the authority that decides how much a pilotage costs, and arranges for the pilots to reach the vessels they are to assist.

Pilots are requested via Maritime Single Window (MSW) Reportal:

https://www.mswreportal.se/

... or by contacting the relevant pilot order centre:

Pilot Order Centre (sjofartsverket.se)

Compulsory pilotage

As a master, when are you subject to compulsory pilotage, i.e. when do you have to engage a pilot? The answer depends on which water areas you're going to navigate in, and also on the properties and cargo of the vessel or the tug and tow.



We begin with the water areas. If you're subject to compulsory pilotage, this starts to apply as soon as the vessel is **underway**. The same goes for a tug and tow. Being underway means that the vessel is not at anchor, not aground and not moored to land.

Compulsory pilotage applies in the following water areas:

- Internal waters outside the coasts
- Lake Vänern
- Lake Mälaren
- The Södertälje canal
- The Falsterbo canal
- The Trollhätte canal and the Göta älv river
- The river Ångermanälven south of Nyland.

The **internal waters** are the waters on the landward side of the **baseline**. The baseline is a line between the outer islets of the Swedish archipelago. Along those parts of the Swedish coast where there is no archipelago, there is also no baseline. However, you may still be subject to compulsory pilotage in those areas if you are to navigate a vessel or a tug and tow in a designated pilotage fairway – find out more below.

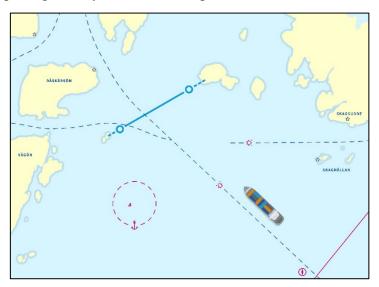


Figur 1. Baseline along the Swedish coast.

Designated pilotage fairways and compulsory pilotage lines

The fairways that lead to the major ports and are most frequently used by commercial shipping, are classified as **designated pilotage fairways**. In annex 1 to the pilotage regulations, you can find out which fairways are designated pilotage fairways.

The **compulsory pilotage line** shows where compulsory pilotage starts to apply when a vessel enters a designated pilotage fairway. Along those parts of the Swedish coast where there is a baseline, the compulsory pilotage line may be either landwards or seawards of the baseline. If, as a master, you're subject to compulsory pilotage, this means that from the moment the vessel crosses the compulsory pilotage line, you must have a pilot on board or a valid PEC.



Figur 2. Compulsory pilotage line.

NOTE:

- ➤ If all mooring lines have to be released for the vessel to be moved from one quay to another, the vessel is **underway** and the master must engage a pilot, regardless of the distance between those quays.
- As a master, whether you're subject to compulsory pilotage or not, you must always engage a pilot if you consider it necessary to maintain maritime safety or the protection of the environment.

The vessel – what size is it and what does it carry?

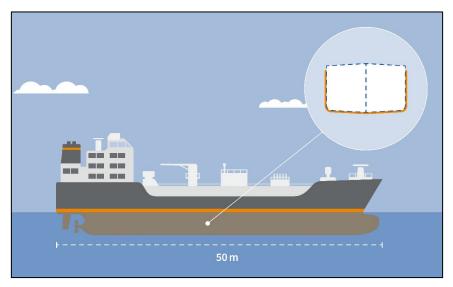
The basic principle is that the master of a vessel with a length of 70 metres or more, or a breadth of 20 metres or more, shall engage a pilot in the Swedish water areas listed earlier on in this section.

The vessel's **length** refers to its length overall, and the vessel's **breadth** to its moulded breadth. It must be possible to verify the length and breadth in the vessel's tonnage certificate, design or similar, such as documentation from a classification society.

Masters of certain vessels carrying certain cargo must always engage a pilot, regardless of the vessel's size. This applies in the following cases:

- When the vessel carries packaged cargo consisting of irradiated nuclear fuel, plutonium or high-level radioactive waste.
- When the vessel carries bulk cargo consisting of liquid substances belonging to category X, Y or Z.
- When the vessel carries bulk cargo consisting of liquefied gas.

The master must also engage a pilot if the length of the vessel is 50 metres or more or its breadth is 14 metres or more, and it carries bulk cargo or cargo residues consisting of petroleum products in tanks protected solely by the vessel's shell plating.



Figur 3. Cargo tank protected solely by the vessel's shell plating.

NOTE:

This applies to cargo and cargo residues only. It doesn't apply to the contents of slop tanks.

The tug and tow – what cargo is carried and what is the size of the tow?

As a master of a tug and tow, you may have to engage a pilot either because of the cargo carried or because of the size of the tow.

Pusher tug combinations are subject to the same pilotage regulations as vessels.

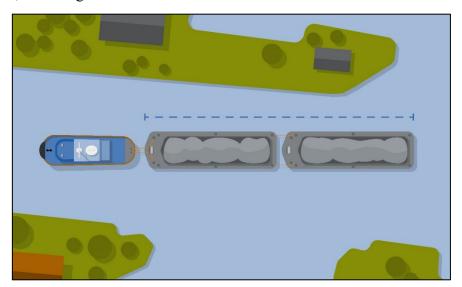
When to engage a pilot because of the cargo of the tug and tow Just as in the case of vessels, the master must always engage a pilot in the following cases, regardless of the size of the tug and tow:

- When the tug and tow carry packaged cargo consisting of irradiated nuclear fuel, plutonium or high-level radioactive waste.
- When the tug and tow carry bulk cargo consisting of liquid substances belonging to category X, Y or Z.
- When the tug and tow carry bulk cargo consisting of liquefied gas.

The master must also engage a pilot if the length of the tug and tow is 50 metres or more or the breadth is 14 metres or more, and the tug and tow carry bulk cargo or cargo residues consisting of petroleum products in tanks protected solely by the shell plating.

When to engage a pilot because of the size of the tow

In this case, it is the size of the tow that determines whether or not the master must engage a pilot. The size of the tow doesn't include the length and breadth of the tug, or the length of the towline. If the tow consists of several interconnected units, the length is measured from the front of the first towed unit to the rear of the last one, including the connections between the units.

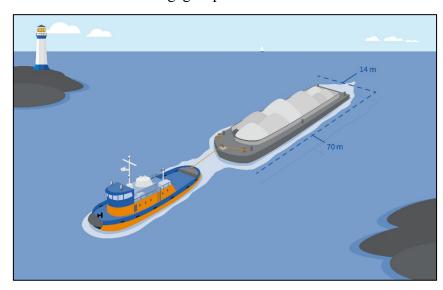


Figur 4. Length of several interconnected units.

So, when do you have to engage a pilot because of the size of the tow? The answer depends on whether or not the tug has a functioning **AIS class A** on board. If it does, you may navigate with a somewhat longer tow without engaging a pilot.

The tug doesn't have AIS class A

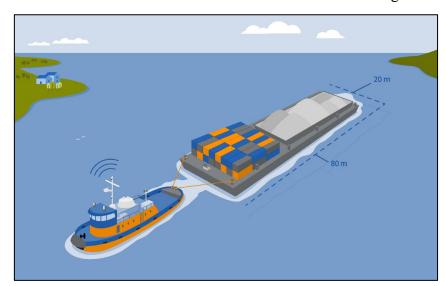
If the tug doesn't have a functioning AIS class A and tows one or several units, the total length of which is 70 metres or more (not counting the connection between the tug and the first towed unit), or the breadth of which is 14 metres or more – then the master has to engage a pilot.



Figur 5. Tug and tow without AIS class A.

The tug has AIS class A

If the tug has a functioning AIS class A and tows one or several units, the total length of which is 80 metres or more (not counting the connection between the tug and the first towed unit), or the breadth of which is 20 metres or more – then the master has to engage a pilot. The AIS must be switched on and show updated and correct information – otherwise it's not considered to be functioning.



Figur 6. Tug and tow with AIS class A.

Pusher tug combinations

Pushing is when a pusher tug – a vessel designed to be rigidly connected to a unit which is purpose-built to be pushed – pushes such a unit in front of it. The manoeuvrability of the pusher tug and pushed unit combination will then be more or less equal to the manoeuvrability of a single vessel.

Figur 7. Pusher tug combination.

In this context, a pusher tug combination is regarded as a single vessel, and therefore subject to the same regulations as vessels.

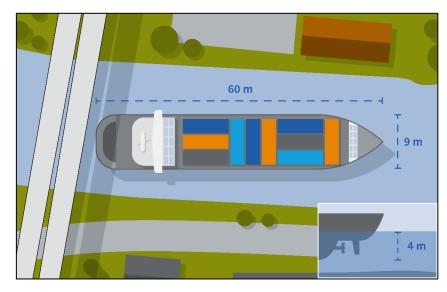
Special regulations for vessels and tug and tows in the Trollhätte canal and the Göta älv river

The special characteristics of the Trollhätte canal and the Göta älv river require stricter regulations when it comes to the size of vessels and tug and tows. The maximum dimensions for navigation in the area without a pilot on board, are found below. If the vessel or the tug and tow exceed either of the maximum dimensions, the master has to engage a pilot.

Vessels

In the Trollhätte canal and the Göta älv river, the master must engage a pilot if either of the following is true about the vessel:

- The length of the vessel is 60 metres or more.
- The breadth of the vessel is 9 metres or more.
- The vessel's draught is 4 metres or more.



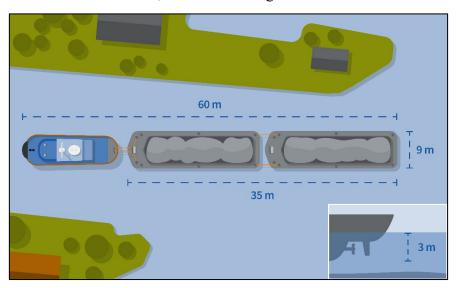
Figur 8. Vessel in the Trollhätte canal and the Göta älv river: the master has to engage a pilot.

Tug and tow

In the Trollhätte canal and the Göta älv river, the master must engage a pilot if either of the following is true about the tug and tow:

- The total length of the tug and tow is 60 metres or more. (The total length is measured from the stem of the tug to the rear of the last towed unit.)
- The total length of the tow is 35 metres or more. (The total length is measured from the front of the first towed unit to the rear of the last one, which means that the connection between the tug and the first towed unit isn't included.)
- The breadth of the tow is 9 metres or more.
- The tow's draught is 3 metres or more.

Where several units are towed, it's the total length or breadth that counts.



Figur 9. Tug and tow in the Trollhätte canal and the Göta älv river.
In this case the master must engage a pilot.

Exemption for masters of certain vessels or of vessels engaged in certain operations

Scheduled operations

As a master of a vessel or a tug and tow engaged in established scheduled operations and calling at the same port at least five times a day, you may be exempted from compulsory pilotage. However, this doesn't apply if the the risk level of the vessel is 4 – find out more about risk levels below.

State vessels

Masters of Swedish state vessels don't have to engage a pilot. Masters of foreign state vessels may be exempted from compulsory pilotage if they participate in certain operations or preparations for such operations. The same goes for masters navigating foreign state vessels used in Swedish territorial waters as part of certain international cooperations.

Risk levels

As the master of a vessel, whether or not you'll have to engage a pilot depends on the **risk level of the designated pilotage fairway** and the **risk level of the vessel**. The risk level is a value from 1 to 4; the higher the risk, the higher the value.

NOTE:

As a general rule, you should always engage a pilot. But if the risk level is low, you may not have to.

Risk level of designated pilotage fairways

The risk level of water areas outside designated pilotage fairways is always 4.

The risk levels of the designated pilotage fairways are found in annex 1 to the pilotage regulations.

The Swedish Transport Agency has determined the risk levels on the basis of following two circumstances:



- how difficult navigation in the designated pilotage fairway is considered to be
- in case of an accident: how severe the damage may be to the environment and infrastructure, and how people in the area may be affected.

Risk level of vessels

The risk level of a vessel is determined by

- its cargo
- the structure around the cargo tanks
- the quantity of fuel oil on board the vessel
- the location of the fuel oil tanks in the vessel.

Risk level 4

The vessels listed below have *risk level 4*. They have risk level 4 because of their cargo and design.

- 1. Vessels carrying packaged cargo consisting of irradiated nuclear fuel, plutonium or high-level radioactive waste.
- 2. Vessels carrying bulk cargo consisting of liquefied gas in accordance with annex 1 to the Swedish Maritime Administration's Regulations (SJÖFS 2006:36) on Maritime Transport of Liquefied Gases in Bulk (the IGC Code).
- 3. Vessel carrying bulk cargo consisting of one or several liquid substances belonging to category X, Y or Z in accordance with Chapter 2, Section 17 of the Swedish Ordinance on the Prevention of Pollution from Ships.

 Vessels with a length of 50 metres or more, carrying cargo consisting of petroleum products in cargo tanks protected solely by the vessel's shell plating.

In the chapter "Compulsory pilotage", we listed a number of cargoes that always make pilotage compulsory, regardless of the size of the vessel. As you can see, the same cargoes mean that vessels carrying them have risk level 4.

Risk levels 3, 2 and 1

Vessels not carrying any of the cargoes listed under "Risk level 4" above, have risk level 3, 2 or 1.

The following vessels have risk level 3:

- 1. Vessels carrying 400 m³ of fuel oil or more, in tanks fully or partially protected solely by the vessel's shell plating.
- 2. Vessels carrying more than 12 passengers.

The following vessels have risk level 2:

- 1. Vessels with a maximum of 12 passengers on board and carrying 100 m³ of fuel oil or more, but less than 400 m³, in tanks fully or partially protected solely by the vessel's shell plating.
- 2. Vessels carrying cargo consisting of petroleum products in tanks protected by double bottom and the vessel's shell plating

The following vessels have risk level 1:

- 1. Vessels with a maximum of 12 passengers on board, and carrying less than 100 m³ of fuel oil, fully or partially protected solely by the vessel's shell plating.
- 2. Vessels carrying cargo consisting of petroleum products in cargo tanks protected by double hull.

NOTE:

- ➤ If the cargo or the quantity of fuel oil changes, this may affect the risk level. For this reason, it's important, for instance when you apply for a PEC, that you state the maximum quantity of fuel oil that will be carried by the vessel when you use your PEC. If the tanks contain more fuel oil than you have stated in the application, your PEC will become invalid.
- ➤ It's of great importance which type of tanks are used for the fuel oil, and how those tanks are protected by means of the design of the vessel.
- Navigating a vessel always involves risks, and as a master you have to be very familiar with those risks. Before navigating the vessel in a fairway, you have to plan the passage and assess the risks, based on the present circumstances.

Total risk level

It's the **total risk level** that'll determine if, as a master, you'll have to engage a pilot. The total risk level is the value you get by adding the risk level of the vessel and the risk level of the designated pilotage fairway.

The lowest possible total risk level is 2 (risk level of the vessel 1 + risk level of the designated pilotage fairway 1 = 2). The highest possible is 8 (risk level of the vessel 4 + risk level of the designated pilotage fairway 4 = 8).

As a master, you must know how to find out the risk level of the designated pilotage fairway in question, and the risk level of your vessel.

EXAMPLE:

- You are navigating a bulk vessel with a length of 109 metres and a breadth of 13 metres. The vessel carries less than 100 m³ of fuel oil in tanks protected solely by the shell plating. This means the vessel has risk level 1. You wish to call at a port where the designated pilotage fairway has risk level 1. The total risk level will then be 2 (risk level of the vessel 1 + risk level of the designated pilotage fairway 1 = 2).
- Navigating the same vessel, you wish to call at another port, where the risk level of the designated pilotage fairway is 2. The total risk level will then be 3.
- ➤ Once in port, you bunker, and at departure the vessel will carry more than 100 m³ but less than 400 m³ of fuel oil in its fuel oil tanks. The vessel now has risk level 2. Since the risk level of the designated pilotage fairway is 2, the total risk level is now 4.

Tug and tow risk levels?

According to the pilotage regulations, tug and tows don't have risk levels. Instead, the risk assessment is based on the risk level of the designated pilotage fairway.

Exemptions from compulsory pilotage

Exemption in designated pilotage fairway

If certain requirements relating to yourself and the vessel are met, you don't have to engage a pilot in certain designated pilotage fairways. In the pilotage regulations, this is called "exemption in a designated pilotage fairway". As the master of the vessel, it's your responsibility to check that the requirements below are met. This means that you don't have to apply to the Swedish Transport Agency. Nor will you get any letter or decision from us regarding the exemption.

In Lake Vänern, special requirements apply. You can read more about them at the end of this section.

You may make use of an exemption in a designated pilotage fairway only if it's a **vessel** you're navigating – not a tug and tow – and only if it's because of the vessel's **size** that you would normally be subject to compulsory pilotage – not because of its cargo.

If you are to make use of an exemption in a designated pilotage fairway, a number of other requirements have to be met too. They concern vessel size, total risk level, manning, equipment and machinery, and also your experience as a master.

NOTE:

➤ In this context, the term **vessel** also includes pusher tug combinations.

Vessel size and total risk level

Point 1, 2 or 3 below must correspond to the call:

- 1. The length of the vessel is less than 110 metres, the breadth less than 20 metres, and the total risk level is 2.
- 2. The length of the vessel is less than 100 metres, the breadth less than 20 metres, and the total risk level is 3.
- 3. The length of the vessel is less than 90 metres, the breadth less than 20 metres, and the total risk level is 4.

Manning

The vessel must have a minimum of three nautical officers signed on. This means at least the master and two natical officers. If it's just the master (you) and one nautical officer, you'll have to engage a pilot or apply for a PEC (read more about PECs below).

Equipment and machinery

The equipment required in accordance with the vessel's safety equipment certificate must function properly. The same goes for the vessel's propulsion machinery and manoeuvring equipment.

The master's experience

As a master, you must have made a passage in the designated pilotage fairway with the vessel in question sometime in the past 12 months. You may have done so with or without a pilot on board, but you must have been present on the bridge, participating actively in the navigation. If, in your capacity as master, you have this experience, an other nautical officer may also be allowed to navigate the vessel in the designated pilotage fairway.

If more than 12 months have passed since your last passage in the designated pilotage fairway with this vessel, you'll have to engage a pilot.

Verifications

Even if you don't need to send in an application to the Swedish Transport Agency, we may request verifications, such as excerpts from a logbook, showing that you and the vessel really meet the conditions stated above. For this reason, it's important that you document the passages in the logbook or similar.

Lake Vänern

In order to make use of exemption in designated pilotage fairway on Lake Vänern, the master must also hold a PEC which is valid in Lake Vänern's designated pilotage fairways. If the master holds such a PEC, the Swedish Transport Agency will make a decision granting the use of the exemption on Lake Vänern. However, due to the risk levels of the pilotage fairways in Lake Vänern, it's only between the approaches of the ports that it's possible to make use of this exemption. This means that if the master holds a PEC which is valid in the designated pilotage farirways Vänersborg to Vänersborg approach and Karlstad to Karlstad approach, and all conditions for an exemption are met, an other nautical officer may navigate the vessel on Lake Vänern between those approaches.

Area exemption

With an area exemption, the master doesn't have to engage a pilot for transfers within certain small areas, or between certain areas that are located near each other. An example might be a transfer between two quays in the same port.

You'll find these areas in annex 5 to the pilotage regulations. Only the masters of some specific vessels and tug and tows are permitted to make use of each of the area exemptions. Those vessels and tug and tows are listed under "Trafik" ("traffic") for each area. In order to make use of an area exemption, the master may have to meet certain conditions. Find those conditions under "Villkor" ("conditions") right under "Trafik".

Pilot Exemption Certificate (PEC)

A PEC is an **individual exemption** from compulsory pilotage. As a master or a nautical officer you have the possibility to apply for a PEC. But if you aren't the vessel's master, you must be aware that you may use your PEC only if the vessel's master has a PEC that's equivalent to yours.

A PEC is normally valid for 3 years.

A PEC:

- is issued to an individual person and valid for that person only
- applies only to navigation of the vessels and/or tug and tows that are stated in the PEC
- applies only to navigation in the designated pilotage fairways and/or areas that are stated in the PEC
- is valid for the period stated in the PEC.

NOTE:

- You are the only person authorised to make use of your PEC.
- You may not use your PEC to navigate a vessel or a tug and tow not stated in the PEC, not even it's a sister vessel.
- Also, you may not use your PEC outside a designated pilotage fairway or an area stated in the PEC.

Applying for a PEC

You have to apply to the Swedish Transport Agency for a PEC.

There are different ways to apply:

- Make a web application on the Swedish Transport Agency's website.
- Apply via mina sidor/sjömanswebben, if you have a Swedish eidentification.
- Send us an e-mail or a regular letter.

Details on what you need to attach to your application are given on the Swedish Transport Agency's website.

When you apply for a PEC, the Swedish Transport Agency will carry out a full risk assessment covering the applicant and the vessel or the tug and tow, in relation to the designated pilotage fairway or the area. We'll focus particularly on the risk level of the fairway, how the cargo is protected and how harmful it is, and on the manning of the vessel.

As an applicant, you have to make **informational passages** with a pilot in both directions of the fairway. You also have to prepare a **bridge book**, and you must pass an **examination**.

Informational passage with a pilot

The purpose of the informational passage is to give the applicant information about the specific fairway, as well as general information about the PEC procedure, the examination requirements and the general conditions for the use of the PEC. The informational passage should be carried out using the vessel or the tug and tow that the application concerns, but it may also be carried out using a sister vessel or an equivalent tug and tow.

The following are examples of topics that the pilot will focus on during the informational passage:

- general information about the characteristics of the fairway
- currents
- ice formation, if any
- shoals
- daymarks
- Aids to Navigation (AtoN)
- suitable and prohibited meeting points
- anchorages (including in emergencies)
- alternative routes.

Booking with the Swedish Maritime Administration

Book the informational passage well in advance via the Swedish Maritime Administration's pilot order centre, to allow the pilot in charge of the passage time to prepare.

An informational passage has an expiry date

If you wish to use the informational passage as a basis for your application for a PEC, you must do so within six months counting from the day you make the passage. If more than six months have passed, you'll have to make a new informational passage.

Other reasons to make an informational passage

It's not only when you're planning to apply for a PEC that you can make an informational passage. An informational passage is also a good idea if you already have a PEC and want to update your knowledge, or if you're just interested in learning more about the fairway in question.

The bridge book

When applying for a PEC, you have to present a bridge book to the Swedish Transport Agency. A bridge book is a book or booklet that can be used by the PEC holder and others in the PEC holder's bridge team when navigating in the fairway. The bridge book shall contain a route plan, in addition to any other information that may be useful to have easy access to before and during your call. Details on what a bridge book shall contain and how to draw it up, are found in the document "Information for those applying for a pilot exemption certificate" that you can find on the Swedish Transport Agency's website.

The examination: simplified procedure

The applicant

To be granted a PEC through the simplified procedure, you must:

- hold a valid PEC
- have completed informational passages with a pilot in both directions of the fairway in question
- have drawn up a bridge book for the fairway
- have passed the Swedish Transport Agency's online test.

By passing the online test, you will demonstrate that you have fully understood this training material.

The vessel

Obtaining a PEC through the simplified procedure can only come into question if the master is subject to compulsory pilotage because of the **size** of a vessel. If the master has to engage a pilot because of the vessel's cargo, the examination will be done through the complete procedure instead.

Obtaining a PEC through the simplified procedure will only be possible if point 1, 2 or 3 corresponds to your situation:

- 1. The length of the vessel is less than 140 metres, the breadth less than 28 metres, and the total risk level is 2.
- 2. The length of the vessel is less than 130 metres, the breadth less than 28 metres, and the total risk level is 3.
- 3. The length of the vessel is less than 120 metres, the breadth less than 28 metres, it is equipped with ECDIS, and the total risk level is 4.

Even if your situation does correspond to point 1, 2 or 3, the Swedish Transport Agency, after the risk assessment, may decide that you'll need to go through the complete procedure.

The tug and tow

Obtaining a PEC through the simplified procedure can only come into question if the master is subject to compulsory pilotage because of the **size** of a tug and tow. If the master has to engage a pilot because of the cargo of the tug and tow, or if the tug and tow don't have a functioning AIS class A, the examination will be done through the complete procedure instead.

Obtaining the PEC through the simplified procedure will only be possible if you hold a valid PEC. In addition, point 1, 2 or 3 must correspond to your situation:

- 1. The total length of the towed unit(s) is less than 110 metres, the breadth less than 26 metres, and the risk level of the designated pilotage fairway is 1.
- 2. The total length of the towed unit(s) is less than 100 metres, the breadth less than 23 metres, and the risk level of the designated pilotage fairway is 2.
- 3. The total length of the towed unit(s) is less than 90 metres, the breadth less than 20 metres, and the risk level of the designated pilotage fairway is 3.

The examination: complete procedure

If the simplified procedure isn't an option for you, the examination may be done through the complete procedure instead.

The complete procedure consists of a theoretical examination and practical examinations in both directions of the fairway. Both the theoretical and the practical examinations are carried out under the supervision of an appointed pilot.

The theoretical examination

The theoretical examination consists of three parts: theoretical questions, blind chart and bridge book.

The **theoretical questions** cover the regulations governing the use of a PEC as well as the general conditions for the use of the PEC. The applicant is also required to answer questions about the fairway concerned.

The **blind chart** is a blank nautical chart where you are required to mark relevant Aids to Navigation (AtoN), names of islands, daymarks, no-go areas, courses, wheel over points, safety distances and other information relevant for the area.

Earlier in this chapter, we described what a **bridge book** is and what it shall contain.

The practical examinations

During the practical examination, you navigate and manoeuvre the vessel yourself, under the supervision of an appointed pilot. The pilot also acts as examiner.

This is what the examination comprises:

• The fairway and the port

In this part of the examination, you'll be required to demonstrate that you're familiar with courses, Aids to Navigation (AtoN), leading lines, shoals, depths, prohibited anchorage, anchorages, suitable or unsuitable meeting points (if any), local regulations on maritime traffic (such as speed limits) etc.

• Navigation and manoeuvring

You'll be required to demonstrate knowledge of and skills in:

- navigation planning based on existing weather conditions
- planning of any meetings, taking into account the present traffic situation
- position in the fairway
- planning of turns and positioning before turning
- manoeuvring to and at the quay
- applying your bridge book with planned routes.

• Visual navigation

You'll be required to demonstrate your knowledge of visual leading lines and Aids to Navigation (AtoN) in the fairway, and also of wheel over marks and turn controls.

• Radar navigation

You'll be required to demonstrate that you possess knowledge of turn controls and safety distances for radar navigation, and sound knowledge of limitations in the radar echoes of the fairway and the port, respectively.

• Handling the equipment

You'll be required to demonstrate that you know:

- how to handle the autopilot
- how to shift control from one conning station to another
- how to handle the settings of the AIS, the radar, the radio equipment and ECDIS (where relevant).

In addition, you'll be required to show that you're aware the limitations and possibilities of these instruments.

• Communication

You have to be able to communicate in English, or in Swedish and English. You have to know:

- what to report in the area, and when to do it
- who to report to, and which channel to use
- where the reporting points (if any) are located
- how to report to and contact VTS (if VTS is avaliable), tugs and linesmen
- how to communicate with other vessels and tug and tows when necessary.

• Cooperation

You have to be able to account for the vessel's SMS (Safety Management System), show that you can cooperate with the bridge team and, where relevant, demonstrate how a co-pilot system works. In addition, you'll be required to show that you can organise the manning and equipment of the bridge to ensure the safe navigation of the vessel, and that you can coordinate the crew and linesmen when manoeuvring to and from the quay.

General conditions for the use of the Pilot Exemption Certificate (PEC)

As a PEC holder, you may use your PEC only if a number of general conditions are met. If they're not met, you're not permitted to use your PEC. The general conditions are found in annex 4 to the pilotage regulations.

Under each condition you'll find an explanation of its content.

- 1. If a nautical officer other than the master holds a PEC, that nautical officer may use his or her PEC only if the master too holds a PEC for the vessel, or the tug and tow, and the fairway.
 - The master must also have a PEC, since he or she must have the competence and possibility to supervise and support in case the other nautical officer feels uncertain. Also, their PECs must be equivalent in the specific situation. This means that if the other nautical officer has a special permission to navigate while receiving tug assistance and the vessel is to be assisted by a tug, the other nautical officer may only navigate during the tug operation if the master's PEC too includes such a special permission.

- 2. A PEC may not be used if the master is obliged to engage a pilot under Chapter 2, Section 1, first paragraph, points 1-4.
 - In practice, this means that if the vessel's risk level is temporarily raised as a result of its cargo or for some other reason, you're not permitted to use your PEC. An example: When applying for the PEC, you state that the vessel will carry petroleum. If the vessel then, temporarily, carries cargo belonging to category Y, you mustn't use your PEC.
- 3. A PEC may not be used while the vessel is receiving tug assistance.
 - The basic rule is that this is not permitted. If you want to use your PEC while the vessel is receiving tug assistance, you'll have to apply to the Swedish Transport Agency for a supplementary addition. If you pass our examination, we can grant a *special permission* exempting you from condition number 3. You'll then be permitted to use your PEC while receiving tug assistance. The special permission will be clearly stated in your PEC.
- 4. A PEC granted through the simplified procedure may be used only if the actual quantity and location of the fuel oil are in accordance with the corresponding information stated in the application for the PEC.
 - ➤ If the fuel oil tanks contain more fuel oil than the volume you stated in your application for a PEC, you're not permitted to use your PEC. You can apply for a supplementary addition to your PEC, and if you do, you may have to go through the complete procedure examinations. The maximum volume of fuel oil that may be carried in tanks fully or partially protected solely by the vessel's shell plating will be stated in your PEC.
- 5. According to the international cargo ship safety equipment certificate, the international passenger ship safety certificate or an equivalent document, a vessel shall have certain navigational equipment. A PEC may be used only if this equipment is functioning properly.
 - ➤ For example, you're not permitted to use your PEC if the vessel, according to the certificate, is to be equipped with two radar systems and one of them doesn't function properly. And you're not permitted to use your PEC if the vessel is a "full ECDIS" vessel and one of the ECDIS systems doesn't function properly.
- 6. A PEC may be used only if the vessel's or the tug and tow's propulsion and manoeuvring equipment function to the extent required for the safe navigation and manoeuvring of the vessel, or the tug and tow, under the existing circumstances.
 - This condition reflects the regulation stating that the master must always engage a pilot, if the master assesses that it's necessary in order to maintain maritime safety or the protection of the environment.
 - For example, if the vessel's bow thruster isn't working and the bow thruster is necessary due to the existing weather conditions, you're not

permitted to use your PEC. If, on the contrary, there's no wind and the bow thruster isn't needed, you may use your PEC.

This condition demands a great deal from the PEC holder, who must be familiar with the area, and also know how to get weather forecasts och how the weather conditions can affect navigation. In some cases, as a PEC holder you must decide yourself whether or not to engage a pilot.

- 7. PEC may be used for a maximum of six hours within a 12-hour period.
 - This means that if you use your PEC for six hours, you're not permitted to use it again during the next six hours.

If the vessel or the tug and tow is to sail in a fairway and the passage is expected take more than six hours, it might be necessary that two nautical officers have a PEC. If you realise that the passage will take more than six hours, you have to sail to the nearest sheltered location to anchor or moor the vessel. This condition demands a great deal from the PEC holder, who must be able to plan the passage and be familiar with sheltered locations, if there are any in the area. It may also be necessary to engage a pilot to meet this condition.

- 8. If the vessel or the tug and tow is to be navigated within a VTS area, the PEC holder shall notify the VTS centre of his or her PEC number and of the time when he or she will begin to use the PEC. If the vessel or the tug and tow is to be navigated outside VTS areas, the same information shall be communicated by way of a general call using VHF channel 16. In both cases the call shall be made in English.
 - Note that the call where you notify the VTS centre of you PEC number is a notification that you make *in addition to* the regular VTS reporting. The regular reporting must still be carried out.
- 9. A PEC holder using his or her PEC shall be present at all times at the place from which the vessel or the tug and tow is being manoeuvred, and participate actively in the navigation.
 - As a PEC holder you must not let anybody else make use of your PEC. You are responsible for the navigation and manoeuvring in the pilotage fairway or the area, which means that you must participate actively in the navigation of the vessel. However, a master holding a PEC may delegate the responsibility to a nautical officer, if the nautical officer has a PEC for the vessel or the tug and tow, and for the fairway or the area in question.
- 10. If 12 months or more have passed since the PEC holder's last passage in the fairway, a pilot shall be engaged in at least one of the directions of the fairway. Concerning Trollhätte kanal, if 6 months or more have passed since the PEC holder's last passage, a pilot shall be engaged in both directions.
 - The Swedish Transport Agency recommends that this passage with a pilot on board should be carried out as an informational passage. That'll make it possible for the PEC holder to update his or her knowledge of the fairway. It's important that you keep a record of your passages in the fairway. The

Swedish Transport Agency may require a verification showing that you meet this condition.

11. If the vessel is towing and shall be equipped with an Automatic Identification System (AIS) under Chapter 4, Section 16, point 2, the AIS shall indicate that the vessel is towing.

➤ If the AIS doesn't show updated and correct information, it may be considered misleading. So make sure it does show correct information. If the AIS is temporarily out of order, you don't meet this condition and, as a consequence, you must engage a pilot.

Special permissions and special limitations

The Swedish Transport Agency may decide on a **special permission** exempting you from one or several general conditions. To be granted such a permission, you have to apply for it to the Swedish Transport Agency. We may require that you go through an examination.

If we decide on a special permission, it'll be clearly stated in your PEC.

The Swedish Transport Agency may also decide on a **special limitation**. This means that we limit your right to use the PEC by adding conditions that have to be met if you are to use it. Special limitations, like special permissions, will be clearly stated in the PEC.

Supplementary additions

If you have a PEC permitting you to navigate a vessel or a tug and tow in a pilotage fairway, you can supplement your PEC with:

- additional vessels or tug and tows
- exemptions from one or several of the general conditions 5–11
- tug assistance
- additional fairways or fairway sections
- additional areas.

If you wish to supplement your PEC, apply to the Swedish Transport Agency for a supplementary addition.

When we receive your application for a supplementary addition concerning a fairway or a fairway section, we'll make a full risk assessment of:

- the vessel or the tug and tow
- the fairway or the fairway section;
- the examination you went through when you were granted your PEC
- your experience of the fairway or the fairway section concerned.

What are the Swedish Transport Agency's requirements then, for an applicant to be permitted to supplement his or her PEC with a fairway or a fairway section? The answer depends on how different the supplementary addition is from what's already covered by the PEC. The greater the difference, the stricter the requirements.

Supplementing your PEC with a vessel or a tug and tow

Your PEC is valid only when you navigate a vessel or a tug and tow stated in the PEC. This means that you'll have to apply for a supplementary addition to your PEC if you want to use it when navigating another vessel or tug and tow – even if it's a sister vessel.

What do you need to do in order to supplement your PEC with a vessel or a tug and tow?

What you need to do also depends on which procedure the supplementary addition falls within: the simplified or the complete.

If the **simplified procedure** is sufficient, we may require that you attach to your application an updated bridge book or a certificate showing that you have made new informational passages.

But if the additional supplement requires an examination according to the **complete procedure**, we may require that you go through that entire procedure or certain parts of it. Which parts you need to go through depends on which procedure you went through to get your current PEC. It also depends on how the new vessel or tug and tow differs from the one that's already included in your PEC.

Supplementing your PEC with an exemption from a general condition

You can also apply to the Swedish Transport Agency for a special permission exempting you from one or several of the general conditions 5–11. In such an application you have to state which condition(s) that you'd like the special permission to exempt you from. In addition, you have to explain why you think you should be granted the special permission.

Supplementing your PEC with tug assistance

According to general condition no. 3, a PEC is not valid when the vessel is receiving tug assistance. **Tug assistance** refers to a tug supporting or giving manoeuvring assistance while the assisted vessel is using its own propulsion.

If you wish to use your PEC while receiving tug assistance, you can apply to the Swedish Transport Agency for a supplementary addition permitting you to do so. You and the vessel will then be subject to a full risk assessment. If both you and the vessel are approved in the assessment, you'll continue with an examination led by an appointed pilot. You're also required to have a meeting with the tug company.

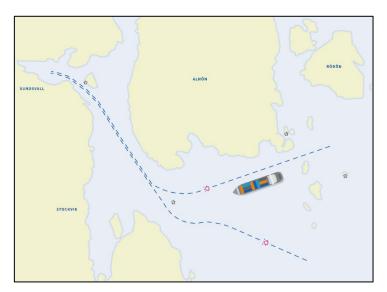
Supplementing your PEC with a fairway or a fairway section

Your PEC is only valid when you navigate a vessel or tug and tow stated in the PEC **in the fairways or areas** that are stated in the PEC. If you wish to use your PEC in a fairway or a fairway section not included in your PEC, you'll have to apply for a supplementary addition.

Adjacent fairways and fairway sections

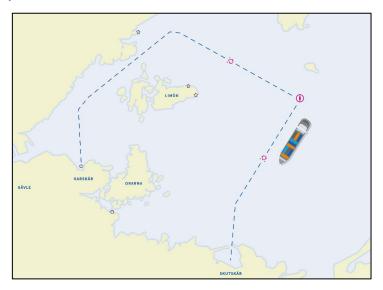
The Swedish Transport Agency only permits supplemental additions of fairways or fairway sections adjacent to those already included in the PEC. Generally, fairways situated adjacent to each other constitute partly the same fairway.

If, for example, you have a PEC for one of the pilotage fairways to Sundsvall, you can supplement your PEC with the other fairway, since it's adjacent to the first one.



Figur 10. Fairways to Sundsvall.

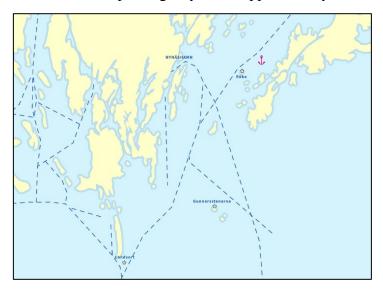
But if you have a PEC for the pilotage fairway to Skutskär, you cannot supplement your PEC with the pilotage fairway to Karskär, since it's not adjacent to the fairway to Skutskär.



Figur 11. Fairways to Karskär och Skutskär.

Supplementing your PEC with an area

Your PEC is only valid in the pilotage fairway which is stated in the PEC. If you wish to use your PEC in a bigger area adjoining that pilotage fairway, you'll have to apply to the Swedish Transport Agency for a supplementary addition.



Figur 12. Fairways close to Landsort.

If the area you want to supplement your PEC with includes pilotage fairways or sections of pilotage fairways, we may require that, for those fairways, you go through examinations according to the complete procedure.

EXAMPLE:

You have a PEC for the fairway Landsort—Nynäshamn, that you wish to supplement with the area Röko anchorage. You should then apply to Swedish Transport Agency for a supplemental addition.

Renewal of PEC

To be granted a renewal of your PEC, you have to be able to show that you've made passages in the fairway concerned with the vessel concerned, or a sister vessel, during the past 12 months. If your PEC covers various vessels and/or fairways, the same goes for all those vessels in all those fairways. In addition, you have to pass the Swedish Transport Agency's online test.

If you have a permission to use your PEC when receiving tug assistance, you have to show that you've used the PEC during tug assistance within the validity period of the PEC. If you can't show that, the renewed PEC will not be valid during tug assistance.

The Swedish Transport Agency can renew your PEC at the earliest six months before it expires. If we receive your application for renewal after the expiry date, we may require that you make passages with someone holding a valid PEC or under the supervision of a pilot. We may also require that you go through some

parts of the examination again. If we receive the application more than three years after the PEC has expired, you'll have to go through the entire examination again.

Temporary PEC

If you're going to make short transfers within a limited area and a limited period of time, you can apply to the Swedish Transport Agency for a temporary PEC. Perhaps, during a limited period, you need to use a tug to tow a barge between point A and point B within an work area.

When the Swedish Transport Agency receives an application for a temporary PEC, we examine it and make a risk assessment. We may require that the applicant accomplish certain tasks, such as an informational passage with a pilot, before we grant a temporary PEC.

Report to the Swedish Prosecution Authority

If you're obliged to engage a pilot, but fail to do so, the Swedish Transport Agency may report you to the Swedish Prosecution Authority. After an investigation a prosecutor will decide if criminal charges should be made against you.



The Swedish Transport Agency can revoke the PEC

As a PEC holder you should also be aware that the Swedish Transport Agency can revoke your PEC. In that case the PEC will be become invalid and you'll have to apply again to get a new PEC. The Swedish Transport Agency may decide that you're not allowed to apply for a new PEC until six months have passed.

The Swedish Transport Agency can revoke your PEC in the following cases:

- You don't meet all the general conditions, or you don't observe the special limitations included in your PEC.
- You have showed a lack of judgement, competence or respect, putting maritime safety, the protection of the environment or the general safety at risk.
- You have broken other maritime traffic regulations.

The PEC may also be revoked if you've been involved in a maritime accident or a serious incident at sea.

If the Swedish Transport Agency suspects that a PEC holder misuses his or her PEC, we may require that the PEC holder engage a pilot. We may also require that the master engage a pilot for other reasons, such as when it's necessary during a limited period as a result of fairway works.

NOTE:

- ➤ If you have several PECs and the Swedish Transport Agency revokes one of them, all of your PECs may be revoked.
- ➤ In addition, the Swedish Transport Agency has the possibility to revoke a PEC if the vessel or the tug and tow has undergone substantial structural changes, if there's been a change of flag or name, or if there have been changes relating to the ownership of the vessel.

Find out more about PECs on the the Swedish Transport Agency's website.

Local information

Inland navigation route planning is a complex task, and the master has a great responsibility for planning the route correctly. The pilot's experience and knowledge of the specific pilotage fairway are extensive, and for this reason it's crucial that you pay attention during the informational passage. That way you'll be able to take in all information about the pilotage fairway where you'll later be navigating. Some of the information may also be found on the website of the port concerned.

In this section we've tried to put together other sources of information that may prove necessary and useful when you plan your call.

Nautical charts and Notices to Mariners (NtM)

A good deal of the most essential information in preparation for a call is found in the nautical chart. The official Swedish nautical charts are published by the Swedish Maritime Administration, and the information in the electronic nautical charts comes from the Swedish Maritime Administration's nautical chart database. This database is continuously updated with changes that the Swedish Maritime Administration is informed about or assembles, through hydrographic surveys, for example. When there's been a significant amendment to the database, the amendment is promptly made available to maritime traffic as an update on the electronic nautical charts and a notice in NtM.

Note that some information about local restrictions, for example, can't always be found in the electronic nautical charts. Also, it's important to be aware that the depths in the Swedish nautical charts are based on a **reference level**, which means that the current water level may be higher as well as lower than the one stated in the nautical chart.

New versions of the official printed nautical charts are published when it's necessary to account for major changes difficult to describe thoroughly in NtM. If no such changes have occurred in an area, several years may pass before a new printed version is published. Each new printed version of a nautical chart contains all amendments published in Swedish NtM since the most recent printed version. Because each new printed version of a nautical chart is a new edition, the previous printed version will no longer be valid.

The Swedish Maritime Administration also publishes "Ufs A, Notices to Mariners Sweden, General Information", a publication containing general information for vessels sailing in Swedish waters.

The Swedish Maritime Administration's NtM publications are found here:

Notices to Mariners (sjofartsverket.se)

To find out more about Swedish nautical charts, their design and limitations, se Ufs A (mentioned above) and Kort 1/Int 1.

We'd recommend that you plan your route using an official nautical chart published by the Swedish Maritime Adminstration.

Standardised passage plans

For several pilotage fairways, the Swedish Maritime Administration has developed standardised passage plans (routes) to be used in digital chart systems. These passage plans are available on the Swedish Maritime Administration's website. They can be helpful when you plan the route, but they need to be adapted to the individual vessel. Depending on the traffic situation and the weather conditions, deviations from the passage plans may be nesessary.

The passage plans can be downloaded from the Swedish Maritime Administration's website:

Routes (sjofartsverket.se)

Fairway restrictions/Maximum draught

Whether or not the master of a vessel is subject to compulsory pilotage is determined by several factors, such as the length and breadth of the vessel. But the master must also keep a check on the draught.

For each fairway, there are recommended maximum dimensions for vessels. The recommended dimensions vary according to current light (visibility) and wind conditions. When it comes to a vessel's draught, the term **maximum draught** is used. The term refers to the maximum static draught that's recommended for a vessel in a specific fairway in order for the vessel to be able to maintain a safe distance to the ground of the fairway while moving along, with account taken to any dynamic movements affecting the draught. The maximum draught is based on conditions when the water level corresponds to the reference level.

The maximum draught is set on the basis of normal conditions and should not be exceeded. You must be aware, though, that even if the vessel's draught is within the limits of the maximum draught, that doesn't guarantee that the vessel will not, under any circumstances, risk touching the ground. For this reason, it's very important that the bridge officer or the pilot is well aware of the limitations of the fairway, making it possible to adapt the navigation accordingly.

To find out more about maximum draughts, restrictions etc. for specific fairways, you can visit the pilotage areas' respective web pages:

Pilotage (sjofartsverket.se)

Local regulations on maritime traffic

Some areas may have local regulations for maritime traffic. Depending on what is regulated, such regulations may be issued by the Swedish Transport Agency or the county administrative board.

The Swedish Transport Agency issues local regulations on maritime traffic in the Södertälje canal, the Trollhätte canal, Lake Vänern and some other areas in Sweden. When planning a call, you have to take those regulations into account. The local reaffic regulations are found on the Swedish Transport Agency's website:

Local regulations on maritime traffic (transportstyrelsen.se)

The county adminstrative board is the authority deciding on speed limits, prohibited anchorages and restricted areas. You'll find information about the

county administrative board's regulations in nautical charts and NtM, and also through waterway signs in the area.

Navigational warnings

The Swedish Maritime Administration's service Sweden Traffic is responsible for navigational warnings in Swedish waters.

Navigational warnings concerning port areas, harbour entrances and internal waters are designated "Local Warnings", while those that concern areas outside internal waters and may affect through traffic, are designated "Coastal Warnings". Only Coastal Warnings are transmitted on NAVTEX. Other warnings are only transmitted on VHF. Sweden also transmits Coastal Warnings on MF radio.

To find out more about the design of the navigational warnings and the division into areas, see Ufs A, Notices to Mariners Sweden. On the Swedish Maritime Administration's website, you'll find navigational warnings in force in Swedish waters.

Navigational warnings (sjofartsverket.se)

Weather information

The Swedish Meteorological and Hydrological Institute (SMHI) issues meteorological and hydrological forecasts and warnings intended for seafarers in Swedish waters. Current weather forecasts are found on SMHI's website, and they are also available via NAVTEX and via VHF and MF radio.

In VTS areas, you can also get weather information by calling VTS and ask for information about the weather in a specific port.

More information about weather forecasts for Swedish waters is found in Ufs A, Notices to Mariners Sweden.

The Swedish Maritime Administration has wind gauges on several locations along the Swedish coast. Current wind speeds are shown on the Swedish Maritime Administration's website in the service ViVa (wind and water information):

ViVa (sjofartsverket.se)

Water level

Great water level fluctuations in the Baltic Sea area arise mainly in autumn and winter, as a result of heavy winds and low-pressure areas passing. Along the west coast, there are also tidal variations of about 30–60 cm (the difference between ebb and flow).

Maritime traffic is mainly affected by low water levels, since a low water level may impede navigation in coastal waters and make it difficult to sail into the ports. When the water level is expected to sink by more than 50–90 cm (depending on which coastal area) below the reference level, a navigational warning is issued.

The Swedish Maritime Administration has wind gauges on several locations along the Swedish coast. Current water levels are shown on the Swedish Maritime Administration's website in the service ViVa (wind and water information):

ViVa (sjofartsverket.se)

Ice conditions and ice restrictions

During the ice season, which is usually from November to May, SMHI's ice service monitors the current ice situation in the Baltic Sea area daily, using satellite images and reports from icebreakers, other vessels and ice observers. Early in the season (November), the monitoring is done on Mondays and Thursdays. SMHI's ice charts can be downloaded from their website:

Swedish ice service (smhi.se)

The Swedish Maritime Administration's icebreakers keep the fairways to icecovered ports open. On their website, the Swedish Maritime Administration publishes current information about any restrictions, ice classes and other requirements:

Icebreaking & Winter navigation (sjofartsverket.se)

Reporting port calls

The Swedish Maritime Administration manages Maritime Single Window (MSW), which is a portal for reporting information to the authorities about vessel calls at Swedish ports. Arrivals and departures are reported electronically in MSW.

When a vessel sails to or from a port or anchorage in Swedish territorial waters, certain data must be reported. Click here to find out which data: <u>Mandatory</u> Vessel Reporting (transportstyrelsen.se)

Reporting in VTS areas

VTS is short for **Vessel Traffic Service**. According to general condition no. 8, PEC holders shall notify the VTS centre of their PEC number and of the time when they'll begin to use the PEC.

But as a PEC holder, you're also required to follow other VTS reporting regulations. Those regulations are found in the Swedish Transport Agency's Regulations and General Advice (TSFS 2009:56) on Vessel Traffic Service (VTS) and Ship Reporting Systems (SRS), where the geographical extension of each VTS area is stated, along with the VHF channel used. The information can be found in the Swedish Maritime Administration's official nautical charts and on the Swedish Transport Agency's website.

The Swedish Maritime Administration is responsible for VTS operations. The Swedish Maritime Administrations is the authority responsible for VTS and for the VTS centres. This means that the VTS operator a PEC holder will talk to over radio, is employed by the Swedish Maritime Administration.

What does the VTS centre do?

In Sweden, the VTS centres assemble and provide information about:

- vessel movements in the VTS areas
- weather conditions
- water levels and available anchorages
- deviations regarding Aids to Navigation (AtoN) or anything else that may affect safety.

If it's necessary, the VTS centre can give advice and warnings to individual vessels.

All rapportering till VTS ska göras på **engelska**. All VTS reporting must be in **English**.

Which vessels are covered by the reporting requirements?

The reporting requirements apply to the following vessels and tug and tows:

- Vessels with a gross tonnage of 300 or more, or a length of 45 metres or more.
- Tug and tows with a total length (measured from the stem of the tug to the rear of the last towed unit) of 45 metres or more.

What must be reported?

- 1. When arriving in a VTS area, and when arriving at and departing from a quay or an anchorage, the person responsible for the navigation of the vessel always has to report his or her PEC number. In addition, the following must be reported:
 - the vessel's name
 - call sign
 - the name of the nearest reporting line or geographic location
 - intended route
 - destination
 - current draught

In the VTS area VTS Gothenburg, the vessel or the tug and tow mustn't leave the berth or anchorage without having first received the VTS centre's permission.

- **2.** When the vessel or the tug and tow passes reporting points indicated in the nautical chart, the following is to be reported:
 - the vessel's name
 - reporting point
 - destination

In the VTS areas VTS Landsort, VTS Mälaren and VTS Gothenburg, reporting is voluntary at some reporting points if the vessel's AIS is switched on and updated, and the AIS information is shown in ECDIS. You'll be informed about which these reporting points are during your informational passage with a pilot.

- **3.** If the vessel or the tug and tow changes its intended route, the following is to be reported:
 - the vessel's name
 - position
 - new intended route
 - destination
- **4.** In case of faulty or damaged machinery or other equipment affecting the vessel's navigation, the following is to be reported:
 - the vessel's name
 - position
 - destination
 - failure or damage that is the reason for the report

At the request of the VTS centre, the officer must also provide other information required for the vessel's safe and effective movement in the area. If you need to call the VTS centre on other occasions to get information about weather conditions, you're welcome to do so.

Faulty Aids to Navigation (AtoN) in a fairway

If you discover faulty AtoN in a fairway, you should report this to the Swedish Maritime Administration's service Sweden Traffic.

You can call Sweden Traffic via VHF or phone them on: +46(0)771 630 685.

Accident reporting and maritime search and rescue

Joint Rescue Co-ordination Centre

The Swedish Maritime Administration's Joint Rescue Co-ordination Centre (JRCC) is the rescue centre managing and co-ordinating maritime and aeronautical search and rescue operations in Sweden, as well as medical transportation of patients from vessels.



The Swedish Sea Rescue Society (SSRS) is a voluntary organisation with many sea rescue stations along the coast of Sweden and on the major lakes. The stations have at their disposal a great number of sea rescue units that form part of the Swedish sea rescue services. The Sea Rescue Society can also be reached visa the Joint Rescue Co-ordination centre.

To find out more about maritime search and rescue in Swedish waters, see Ufs A, Notices to Mariners Sweden.

Call on channel 16

In case of an accident, it's important that you know how to get assistance. You can reach the Joint Rescue Co-ordination centre on VHF channel 16 or by phone: +46(0)10 492 77 00 (switchboard).

Call 112

112 is the general emergency number in Sweden. If you have mobile coverage, you can also call 112 to get connected to:

- JRCC/maritime search and rescue
- ambulance
- fire brigade
- police.

Official on call

In case of major accidents or incidents you can also get in touch with the Swedish Transport Agency's official on call ("tjänsteman i beredskap", TiB). The easiest way to get in touch is by phone: +46(0)771 80 09 00.

Always report any accidents or incidents to the Swedish Transport Agency

Always report to us any accidents, as well as incidents and minor accidents – even if it wasn't necessary to seek help when it happened. The reporting obligation lies with the master, but any other crew member may send in the report.

How you report

Send in the report via the Swedish Transport Agency's website.

Accidents & near-misses (transportstyrelsen.se)

Or fill in the form on the website and e-mail it to:

sjoutredning@transportstyrelsen.se

USEFUL TIP:

> Print the form and keep it in your bridge book.

Report all accidents – and contribute to the prevention of future accidents

Accident reporting is also important for statistical reasons: it makes it possible to prevent accidents by concentrating resources where they're most needed. This is why it's also important to report incidents, where an accident has been prevented. That way, it'll be possible to do something about a problem before an accident happens.

