

## CASUS: Ferry service

Shipping company KOENDES maintains a ferry service between Harlingen and the Frisian Islands Vlieland and Terschelling.

Their administration is a complete mess and therefore they asked us to develop a completely new system in which paying, reservation and booking a passage all need to be included.

The current situation is as follows:

There is a ferry boat, named HoekSpat, that sails between Harlingen and Terschelling according to a strict schedule. The crossing time is one hour and 45 minutes and departures are at 7:00, 12:00 and 17:00 from the island and at 10:00, 15:00 and 19:00 from Harlingen. In winter the last departure from the island and corresponding return from Harlingen is only performed on Tuesdays and Fridays.



The boat can hold max 900 passengers and 45 cars. There is also space for a limited number of trucks, but these cannot be higher than 2,90 meters. For a normal car a standard length of

4,5 meters is taken. Payments go per standard length. If a car is longer than 4,50 meters, but shorter than 9 meters, a double rate needs to be paid. Weight and trailers are not taken into account separately.

For trucks there is also a rate per 4,5 meters of length.

Passengers can only buy a back and forth ticket. These tickets can be bought at the office or via the website. In the last case, passengers get a code they can show on their phone (a so-called e-ticket) or simply print the ticket.

For cars and trucks only reservation through the website is possible. Such a reservation needs to be made at least one week in advance (i.e., one week before the departure date).



Reservations need to be paid in advance, i.e., a reservation only becomes valid after the corresponding payment. Such payments can be done digitally via the website or by asking to send a bill. Payments need to be received one week before the departure date.

Reservations can be cancelled till one week before the departure date as well. In case of a cancellation, the total amount minus costs for administration will be paid back.

Reservation within the last week for departure is not possible.



Passengers can bring one bike per person (the company has special bike tickets for this) or one or more dogs (with a special dog ticket, at this moment a dog and a bike ticket are the same).

Another ferry boat, named Vliehors, sails between Harlingen and Vlieland and can carry 750 passengers and 25 cars. Time of departure is always 15 minutes after the departure time of the HoekSpat, because the harbour in Harlingen is not large enough for two boats to depart at the same time. Tickets for Vlieland are of the same price as going to Terschelling.

Vlieland is a low-traffic island. Normal passengers are not allowed to take their car with them to the island. Only people having a special permit and trucks carrying cargo for the island are allowed.

Such a car permit can be obtained from the local authority of Vlieland. Inhabitants of the island will get such a permit quite easily, others only under very special conditions. Reservations for a crossing with a car can only be made if the corresponding permit code is known and filled in in the corresponding web form.

There is also a faster boat, named Koegelwieck. This boat can only carry passengers and dogs. Bikes and cars are not possible. The Koegelwieck can carry 175 passengers. For this boat you need a special ticket, i.e., in fact the normal ticket plus a surcharge per single trip. It is not needed to go both forth and back using the Koegelwieck, so, for example, you can go to Terschelling using the Koegelwieck and return using the HoekSpat, thus paying only one time the surcharge.

The Koegelwieck sails in a kind of a triangle from Harlingen to Terschelling to Vlieland and then back to Harlingen. It sails in 45 minutes from Harlingen to Terschelling and in 15 minutes from Terschelling to Vlieland. Departures from Harlingen are on 9:15, 16:00, 19:30, from Terschelling at 7:30, 10:30, 16:30, and from Vlieland at 8:00, 11:00, 18:00.

The HoekSpat and the Koegelwieck lie on Terschelling at night, the Vliehors on Vlieland at night. Almost all of the crew comes from the corresponding islands as well.

KOENDES is in urgent need of an application able to register all the information as mentioned above including possibilities for making reservations on the website.