

# Corridor



# **Short Sea Shipping corridor - feasibility study**

Hitra - Bremerhaven

### Definition of a corridor

Corridors are characterised by a connection between a region of origin and a region of destination. In the ideal situation a balance of flows in both directions is obtained. In the framework of Food Port, a **green** corridor is considered in a broad way. In terms of "sustainability" it combines on the one hand environmental and climate criteria and on the other hand economic (cost-efficiency) criteria. Setting up a corridor which is green in the (narrow) sense of being environmentally friendly, but not price competitive, will not be sustainable and could not be developed on a structural basis.

# Map



# Description

This pilot includes the results from research on fresh fish logistics being done by the Food Port partners of Bremerhaven. It contains a feasibility study for the transport of farmed salmon from Mid-Norway (mainly from Hitra, Sør-Trøndelag region) to Bremerhaven, Germany, via short sea shipping (SSS). The research is based on the hypothesis that SSS is more sustainable than road transport. The feasibility study aims to reveal more sustainable logistics solutions in the field of food logistics. For this study, 6 different scenarios were taken into account.

# General objectives

The objective of this study is to be able to make reliable statements about the conditions for the feasibility of fresh fish transports via short sea shipping from Norway to Bremerhaven.

In order to demonstrate that short sea shipping transport is more sustainable than road transport, the purposes of this study are:

- Calculation of Carbon Dioxide (CO2) emissions according to the different scenarios;
- Identification of critical aspects of the technical feasibility;
- Investigation of economic efficiency;
- Examination of structural feasibility in the logistics chain by focusing on the market participants.







#### **Process**

Actions that have been undertaken to conduct this study:

- Desk research;
- CO2 calculations;
- Interviews with shippers/logistics providers/ processors;
- Empirical research and analyses (by students);
- Transnational knowledge exchange (through meetings and telephone calls);
- Knowledge exchange with scholars and business operators of other INTERREG projects (LoPinod/ StratMoS/North Sea Fish).

### Results

- Modal shift from land-based transport to short sea shipping is attractive with regard to CO2 emissions calculations. A vessel seems to be preferable to a truck.
- Transport including cooling process is possible but a truck can contain more pallets than a container and handling times for a container are too long compared to a truck.
- Time and costs look competitive already today based on market prices, but quantities seem to be a pitfall.
- We perceive a general willingness to change: there is a certain sensitivity for green transports, but more at corporate than at
  operational level. Customers and politicians have a certain awareness for CO2 impacts, but there is no willingness to cover
  for premium costs.
- Time of transport is a critical success factor for fresh fish.

### Lessons learned

- 1. Dealing with the specifics of perishable goods (salmon) that dictates speed and limits alternative modes of transportation and influences the quality severely.
- 2. It is very interesting and worthwhile to exchange knowledge with other partners within one specific theme. This enables thinking 'out of the box'.
- 3. To appreciate the creation of synergies and the knowledge transfer amongst researchers and between researchers and business professionals.

# Case initiated by







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