



## Corridor

### Agro Food Logistics in Denmark - setting up a new Food Port corridor

*Padborg - Rotterdam*

#### 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

The Danish agricultural and food industry is the country's largest industry and innovation sector.

The UK is the third largest buyer of Danish agricultural food and currently, agricultural food is moved either by road or by sea from Denmark to the UK. Danish food producers transport 27,000 tons of agricultural products and food to the UK by truck every year. But many food producers also utilize the sea transport route from Esbjerg in Denmark to Immingham in the UK. However, in this study a new supplementing food port corridor for the Danish food producers is identified and analysed; using rail transport from Padborg in Denmark to Rotterdam in Holland.

The study is based on the hypothesis, as far as food trade is concerned, that the short sea shipping transport (Scenario 1) is the most economical and sustainable modal, followed by rail transport (Scenario 2) and then road transport (Scenario 3).

#### General objectives

The main objective of this activity is to implement a real-life modal shift pilot through horizontal collaboration between 4 shippers: **Danish Crown A/S, Tican A/S, Danpo A/S, Lantmännen Unibake Danmark A/S**. Furthermore, this study aims to reveal the most sustainable logistic solution for food producers regarding their shipment between Denmark and the UK. Therefore, a comparison of existing and potential food transport scenarios, which include calculations on economic efficiency and carbon footprint, is undertaken. Finally, to clarify the pricing for short sea shipping between Denmark and the UK, a user driven excel tool has been developed to illustrate the cost structure of shipping freight. In other words, the partners define their own inputs (service speed of the vessel, number of trips per year, fuel price and ship price, etc.) and receive the corresponding results regarding the expected cost of short sea shipping.



## Process

Different steps or actions in the set-up and implementation of this pilot project are:

**Augustus & September 2013:** Interviews with relevant food producers: Investigation of willingness to collaborate;

**October 2013:** Workshop at the University of Southern Denmark: Identification of needs and opportunities for collaboration;

**December 2013:** Non-disclosure Agreement distributed and signed;

**December 2013:** Meeting: First results of the feasibility study presented and decision made to continue with an intermodal solution;

**December 2013 & January 2014:** Letter of Intent distributed and signed;

**February 2014:** Food Port Conference: Presentation of the collaboration and the solution.

## Results

The main deliverable of this study is the realisation of a real-life horizontal collaboration between Danish Food companies (some even are direct competitors) regarding their transportation of food from Denmark to the UK. Furthermore, a new 'green corridor' between Denmark and the UK was identified: A new intermodal connection consisting of rail transport (between Padborg in Denmark and Rotterdam in the Netherlands) and short sea shipping (from Rotterdam in the Netherlands to Immingham in the UK). Unexpectedly, this combined new rail and short sea connection shows economic advantages, not only compared to the road transportation but also to the existing port-port shipping link between Esbjerg in Denmark and Immingham in the UK. However, the existing port-port shipping link is the most attractive solution with regard to CO2 emission calculations.

## Lessons learned

There are a number of generic lessons learned from this study. First, we experienced openness and a generally high level of willingness of the Danish Food Companies regarding collaboration. Regarding short sea shipping, we learned that the pricing of short sea shipping is not well understood and that uncompetitive freight rates can threaten the competitiveness of Danish Food producers and thereby limit their export potential to the UK.

## Case initiated by



Contact **Lisbeth Brøde Jepsen** - University of Southern Denmark - lbr@sam.sdu.dk

Full corridor report is available on [www.food-port.eu/downloads](http://www.food-port.eu/downloads)