

The Fehmarnbelt Fixed Link

A European engine of growth

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An aerial photograph of the Fehmarn Belt, a narrow body of water between the Danish island of Fehmarn and the German mainland. The water is a deep blue, and the surrounding land is visible on both sides. The sky is clear and blue.

Femern
Sund \approx Bælt

Location of the Fehmarnbelt



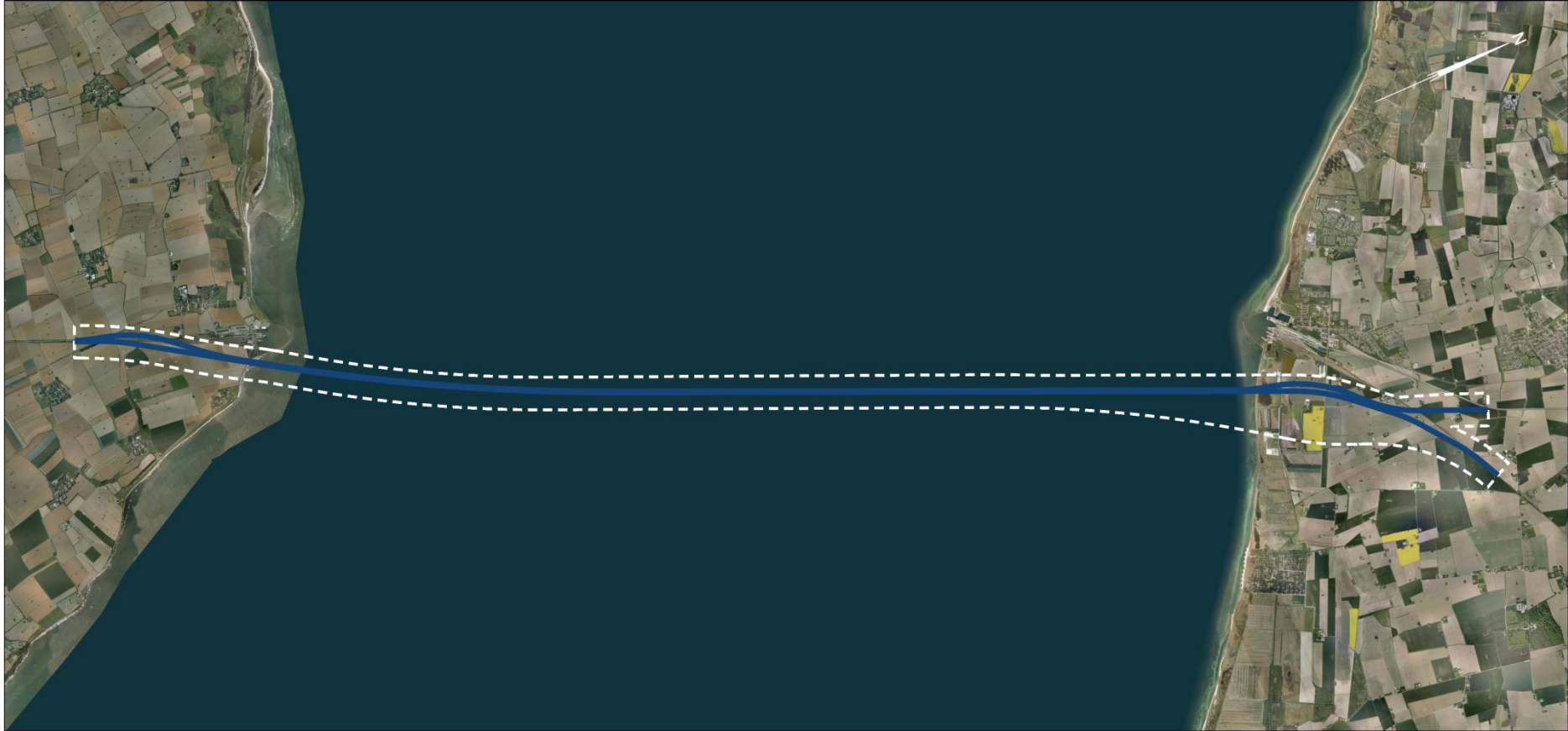
Femern A/S

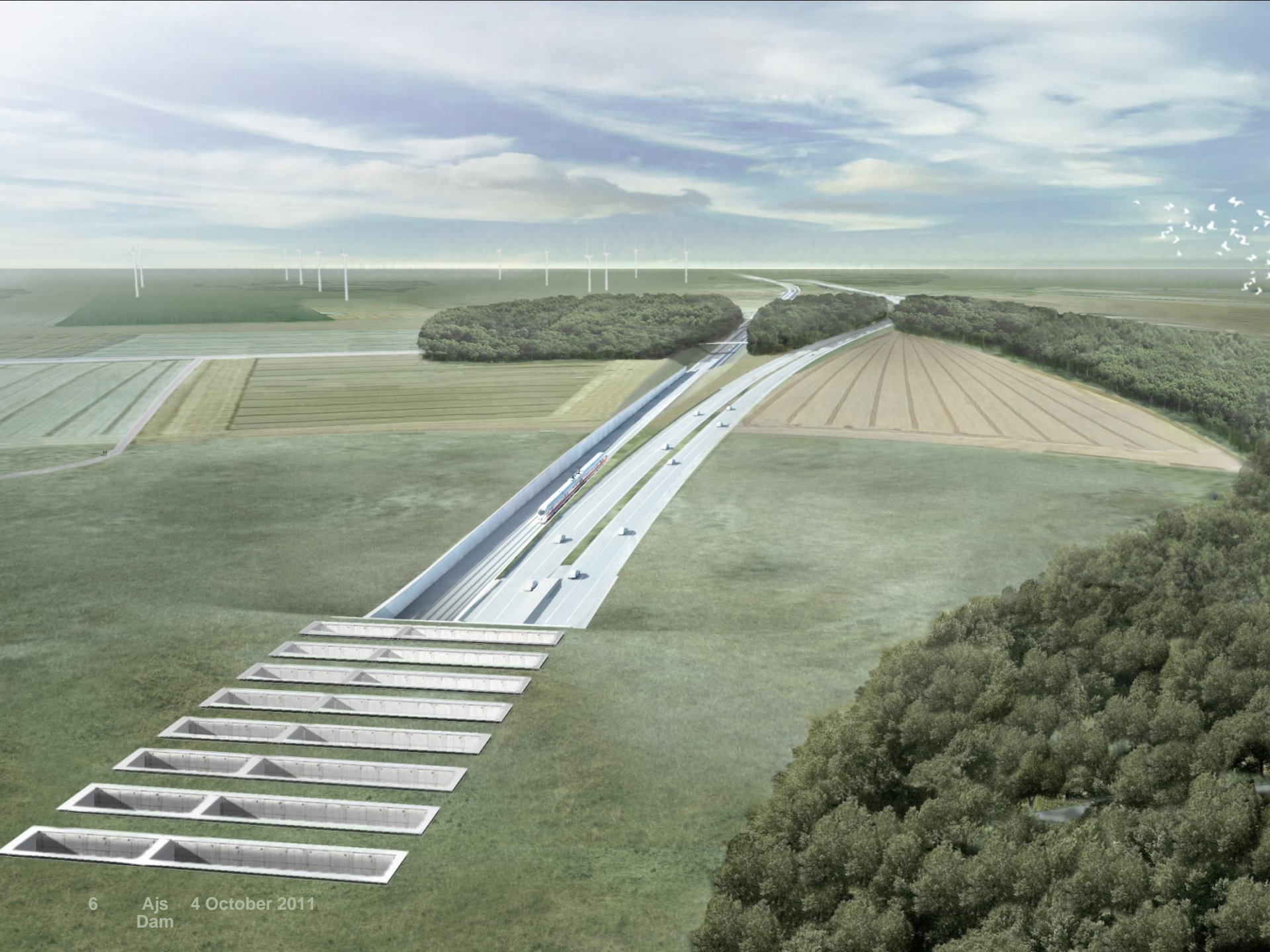
- A private organisation, 100 % owned by the Danish state
- Until 2013 Femern A/S is responsible for:
 - Economy
 - Planning
 - Approval of the project
- It is assumed that Femern A/S, in consent with the Danish authorities, will be responsible for:
 - Construction of the fixed link (2014-2020)
 - Operation and maintenance (from 2020)
- Main office in Copenhagen, 70 employees (2011)
- Experience from the Great Belt Bridge and the Øresund Link

Location of the Fehmarnbelt



The alignment corridor



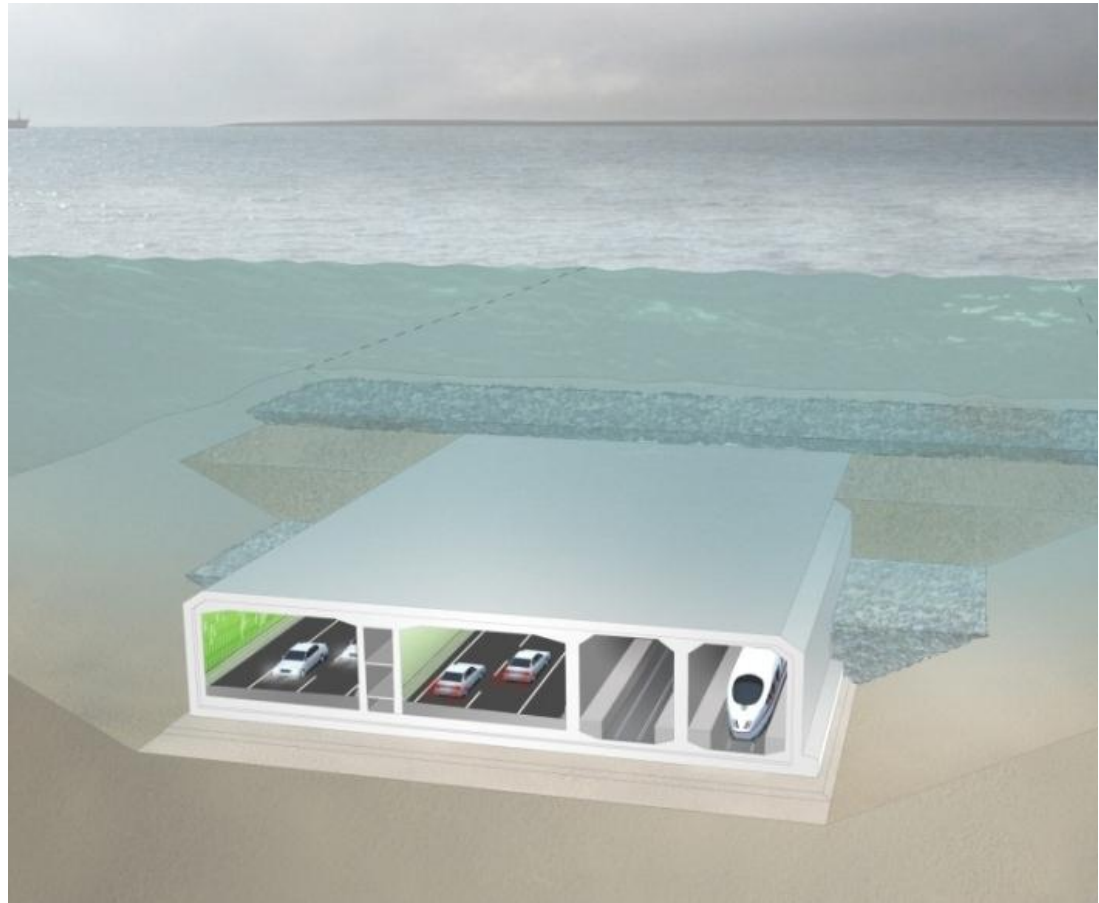






What is the preferred technical solution?

- An immersed tunnel under the seabed
- The world's longest (17,6 kilometres)
- Every tunnel element has the dimensions (in meter):
 - Lenght 217
 - Width 42
 - Hight 9
 - They each weigh 73.500 tonnes





**The 79 standard elements
will be manufactured in
Rødbyhavn and towed
out...**



... on the open sea and to the tunnel alignment. Here they will be immersed into the tunnel trench and joint together one by one.

Who is paying for the fixed link?

	Preliminary breakdown
Danish users	26 %
German users	36 %
Swedish users	24 %
Users from other countries	14 %
Total	100 %

*Source, traffic forecast, FTC, 2003 from the Danish Ministry of Transport

Close the gap

- The Fehmarnbelt Fixed Link will close a gap in the Northern European infrastructure
- **The fastest, cheapest and most environmentally responsible way to transport goods in Northern Europe**
- Strengthen the competitive power...
- Increase the growth...
- Support the industries...
- **... in the whole Northern European economy**

Faster railway connection to Europe

Today:

Copenhagen-Hamburg: 4½ hours

Stockholm-Hamburg: 10 hours

After Femern:

Copenhagen-Hamburg: 3 hours

Stockholm-Hamburg: 8 hours

"The European Corridor":

Copenhagen-Hamburg: 2 hours

Stockholm-Hamburg: 4½ hours

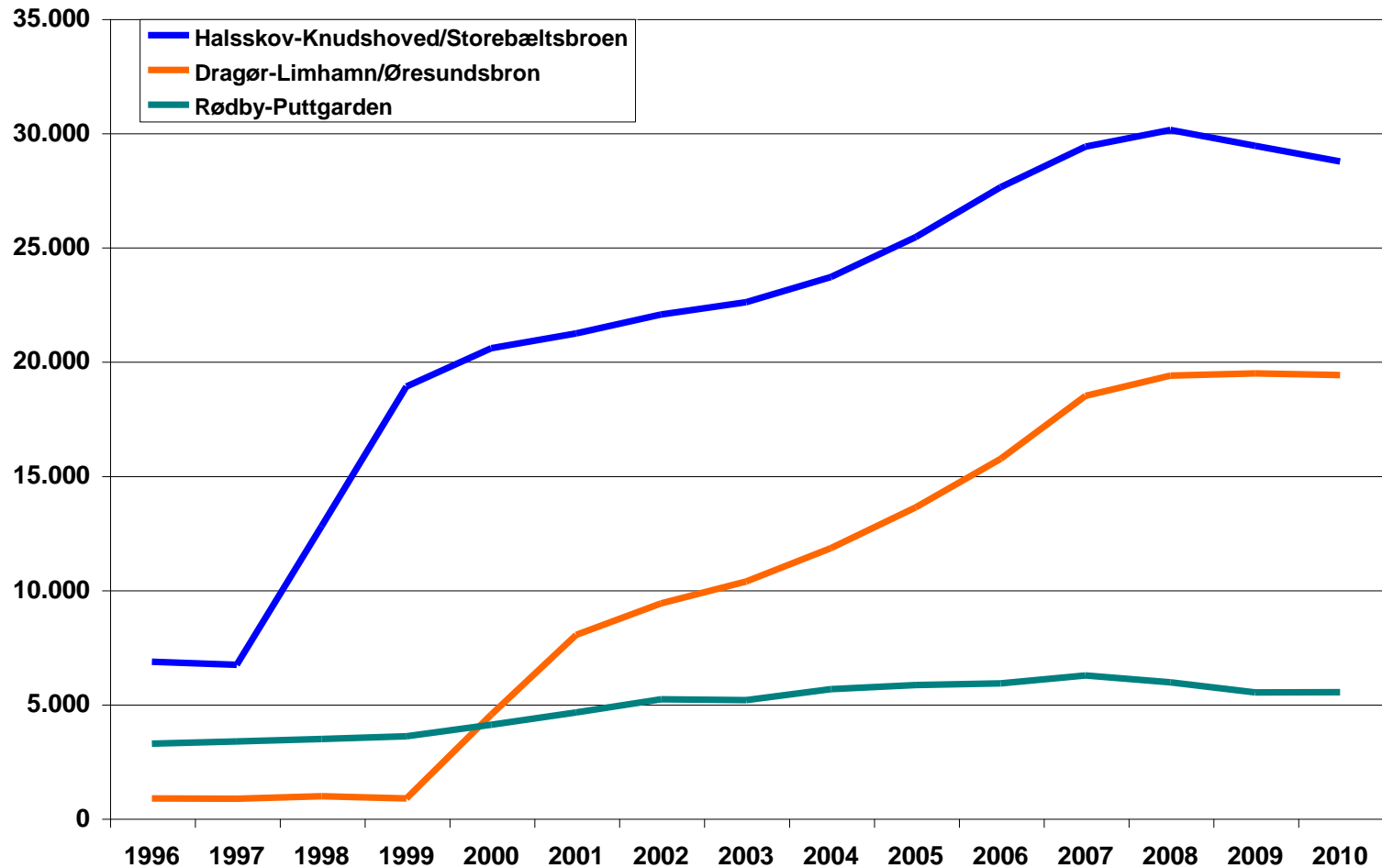


Large market interaction today

- Many rational arguments – also in a logistic perspective:
- Germany is the largest market for goods from the Scandinavian countries
- **Example:** in 2010 Germany bought 17% of all Danish exports, in total 12,3 billion Euros
- Reversively, the German goods accounted for 20 % of all Danish imports in 2010, in total 13,2 billion Euro

Average daily traffic over the three crossings

Vehicles



Femern
Sund ≈ Bælt

Why we are building the Fehmarnbelt Fixed Link

Our experience from the Øresund Fixed Link:

Year Ferry Vehicles in total

1999: 2.9 + 0.0 = 2.9 mil. vehicles

2001: 2.3 + 3.0 = 5.3 mil. vehicles

2009: 2.2 + 7.1 = 9.3 mil. vehicles

Travelers in total

5.2 mil. travelers

14.0 mil. travelers

26.4 mil. travelers

What is the status of the project?

- Currently: working hard on finalising our *Environmental Impact Assessment report*.
- 2012: Construction work put out to tender
- 2013: Construction Act draft is expected to be presented to the Danish parliament
- 2014: Construction begins
- Construction period, incl. preparation of manufacturing plant in Rødbyhavn (approx. 6½ years)
- The aim is for the fixed link across Fehmarnbelt to open to traffic in 2020

