The Fixed Link across the Fehmarn Belt

The project will consist of a four-lane motorway and a double-track electrified railway. According to the plan, the Fehmarn Belt fixed link will open for traffic in 2024. An immersed tunnel is the preferred technical solution.

On 3 September 2008, Denmark and Germany signed the state treaty on a fixed link across the Fehmarn Belt. On 15 April 2009, the treaty was ratified by the Danish Parliament in the adoption of the Act on Project Planning of the Fixed Link across the Fehmarn Belt with hinterland connections in Denmark.

Denmark is responsible for the planning and design as well as the funding, construction and operation at the coming Fehmarn Belt fixed link. Denmark will also be sole owner and operator of the fixed link. Germany will upgrade its land facilities on road and rail leading to the fixed link.

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The Fehmarn Belt link will close a gap in the infrastructure between Scandinavia and continental Europe and will entail a higher level of flexibility and considerable time savings for both passenger transport and transport of goods, which is expected to increase significantly towards 2025.

Improved connections between Scandinavia and Central Europe is of great importance as this strengthens traffic connections to the major Danish export markets. As was the case with the fixed link across the Great Belt and Oresund, the Fehmarn Belt fixed link will similarly become a significant upgrade of both national and international transport corridors benefiting societal development and economic growth in Denmark.

The project not only entails the establishment of a fixed link across the Fehmarn Belt, but also an extension of the hinterland connections in Denmark and Germany. In Denmark, this includes e.g. an expansion of the railway infrastructure on South Zealand and Lolland-Falster. The framework for the railway traffic is thereby strengthened through the project.

For trains passing through Funen and Jutland, the journey from Copenhagen to Hamburg will be shortened by approximately 160 km, which will benefit e.g. rail freight. In addition,
road and rail traffic, which use the ferry connection between Rødby and Puttgarden today, will save about an hour travel time between Copenhagen and Hamburg. Besides the socio-economic gains connected with the reduced travel time, the fixed link will also bring about a reduction of CO2 emissions from the transport compared to continued ferry services.

The fixed link across the Fehmarn Belt will benefit regional traffic as railway capacity to regional traffic between Zealand, Funen and Jutland will be freed. The Fehmarn Belt fixed link will be a crucial contributory factor in the strengthening of the overall infrastructure between Eastern and Western Denmark.

The fixed link across the Fehmarn Belt is a high priority project in relation to the expansion of the Trans-European Transport Network (TEN-T) and the Commission has via TEN-T preliminary announced EU funding of approximately 2 billion Danish Kroner (€ 270 million) for the project from 2007-2013.

Fonte: Ministry of Transport and Building,

Overview of the principal contracts In the autumn of 2013, Femern A/S invited tenders for four principal contracts:

- **Dredging of the seabed and reclamation** The contractor is required to dredge a deep trench approximately 18 km long, 80 m wide and 12 m deep in the Fehmarnbelt, where the tunnel will be located. The dredged seabed is to be reused for land reclamation mainly off the coast of Lolland and to a lesser extent off the coast of Fehmarn. The contract comprises other major dredging works, e.g. the harbour basin with navigation channels leading to the site in Rødbyhavn where the tunnel elements will be produced.

- **Construction of the northern section of the tunnel** The contractor is to be in charge of half the tunnel construction and thereby construct half of the production site for the tunnel elements in Rødbyhavn. The contractor will also produce, transport and immerse half the tunnel elements, i.e. about 40 standard elements and 5 special elements corresponding to about 9 km of tunnel.

- **Construction of the southern section of the tunnel** The contract includes the same tasks as the northern tunnel.

- **Construction of the portal buildings, ramps and connecting facilities on land** The contractor will build the two tunnel portals as well as the cut-and-cover tunnels on land in Germany and Denmark respectively. The contract covers exit and approach ramps and connections with the existing transport infrastructure on land, small buildings and bridges as well as completion of all finishing works such as asphalting of all roads and cladding for the walls throughout the entire tunnel.

In 2014 Femern A/S invited tenders for another two major contracts:
Electrical and mechanical installations in the tunnel, including lighting, drains, ventilation, power supply, fire fighting, safety systems, traffic control, alarms and communication as well as software for control and monitoring in and around the tunnel.

The construction of the large new transformer station east of Rødbyhavn that will supply power for train services and electrical installations in the tunnel.

-Consortium Fehmarn Belt Contractors

Prequalified for contracts Tunnel, Dredging & Reclamation Tunnel, Portals & Ramps Tunnel North Tunnel South

Contact person Fehmarn Belt Contractors can be contacted via this email address: fehmarnbeltcontractors@boskalis.com for the Tunnel, Dredging & Reclamation contract or fbc_info@hochtief.de (Mr. Rainer Mutzberg) for the Portal & Ramps, Tunnel North and Tunnel South contracts.

Description Fehmarn Belt Contractors is an international consortium consisting of the four principal partners HOCHTIEF, Züblin, Boskalis and Van Oord. Together with our nominated subcontractors MT Hojgaard, Strukton, Volker Construction, Capita Symonds and Grontmij.

-Consortium Femern Link Contractors

Tunnel Dredging & Reclamation Prequalified for contracts Tunnel, Dredging & Reclamation

Contact persons for our different types of services:

Mr Cedric Dewandre Dewandre.cedric@deme.be

Types of services: Mechanical and hydraulic dredging & hydraulic reclamation.

Office address:

Dredging International N.V. Scheldeleid 30 B-2070 Zwijndrecht Belgium Mr Rune Svenstrup rusv@aarsleff.com Types of services: Civil works, rock works, mechanical reclamation & earth moving. Office address: Per Aarsleff A/S Lokesvej 15 DK-8230 Aabyhoej Denmark.

Short description

The Femern Link Contractors Tunnel Dredging and Reclamation Consortium is a consortium between Dredging International N.V. (DI) and Per Aarsleff A/S (PAA) formed to undertake the Tunnel Dredging and Reclamation Contract.

-Consortium Jan de Nul

Prequalified for contracts Tunnel, Dredging & Reclamation
Contact person

Your point of contact for the Femern tunnel dredging project at Jan De Nul will be Kobbe PEIRS Area manager Tel : +32 53 731 711 Fax : +32 53 781 760 Email : info@jandenul.com

Short description

Jan De Nul NV is a Belgium-based contractor in dredging, marine construction works and civil engineering. The company is a member of the Jan De Nul Group.

- Consortium OHL-Daewoo – Daelim

Prequalified for contracts Tunnel, Portals & Ramps Tunnel North Tunnel South.

Contact person

The JV (Joint Venture) Procurement team for the Fehmarnbelt fixed link project is made up of the following people: Mr Santiago Sánchez Fernández (santiago.sanchez@ohl.es) is the focal point for communication with companies in working with us on the Fehmarnbelt Fixed Link project. We welcome companies approaching our JV by email to: Mr Jang Ho-June (hojune.jang@daewooenc.com) and Mr Kim Jae.Yeon (jy.kim@daelim.co.kr).

- Consortium Salini-Impregilo-Samsung-Bunte

Prequalified for contracts Tunnel, Portals & Ramps Tunnel North Tunnel South.

Contact person

In particular, our Consortium comprises four leading specialised construction companies as detailed below: 1. SALINI S.p.A. – Italy (Leader of the consortium); 2. IMPREGILO S.p.A. – Italy; 3. SAMSUNG C&T Corporation – Korea; 4. JOHANN BUNTE BAUUNTERNEHMUNG GmbH & Co. KG – Germany.

General enquiries to our Consortium from prospective sub-contractors/suppliers related to the Fehmarnbelt project can be addressed to: - Mr. Carlo Giraudo, Procurement Manager – Salini S.p.A. c.giraudo@salini-impregilo.com

- Consortium Femern Link Contractors

Prequalified for contracts Tunnel, Portals & Ramps Tunnel North Tunnel South.

Short description

The Consortium FLC – Femern Link Contractors – is an integrated Joint Venture between several companies:

1. VINCI CONSTRUCTION GRANDS PROJETS S.A.S., a French company whose registered office is at 5, cours Ferdinand de Lesseps 92500 Rueil-Malmaison, France, www.vinci-construction-projects.com
2. Per Aarsleff A/S, a Danish company whose registered office is at Lokesvej 15, DK- 8230, Denmark, reg. no 24 25 77 97 www.aarsleff.com

3. CFE SA, a Belgian company whose registered office is at 42, Avenue HerrmannDebroux -1160 Bruxelles, Belgium, reg. no BE 0400.464.795 www.cfe.be


5. BAM Civiel BV, a Dutch company whose registered office is at H.J. Nederhorststraat 1, 2801 SC Gouda, the Netherlands, reg. no 24347782 www.bamciviel.nl

6. BAM International BV, a Dutch company whose registered office is at H.J. Nederhorststraat 1, 2801 SC Gouda, the Netherlands, reg. no 27068392 www.baminternational.com

7. Wayss und Freytag Ingenieurbau AG, a German company whose registered office is at Eschborner Landstraße 130-132, 60489 Frankfurt am Main, reg. no HRB 49323 www.wf-ingbau.de

8. Max Bögl Bauunternehmung GmbH und Co. KG, a German company whose registered office is at Max-Bögl Straße 1, D-92369, Sengenthal Germany, reg. no HRA 3536 www.max-boegl.de

(1)(2)(3)(4)(5)(6)(7)(8) are together called Femern Link Contractors and duly represented by Vagn Rahbek as Procurement Manager. The office address of the Joint Venture is at: Hedegaardsvej 88, 2770 Kastrup, Denmark.

-Consortium Immersia

Prequalified for contracts Tunnel North Tunnel South.

Contact person Please contact by email: tenderteam@immersia.eu

Short description


- Construction Act on the Fehmarnbelt link passed by the Danish Parliament

28.04.2015

A majority in the Danish Parliament has today adopted the bill for the Act on the construction and operation of a fixed link across the Fehmarnbelt with associated landworks in Denmark and the bill for the Act amending the law on Sund & Bælt Holding A/S, the Act on the planning of the fixed link across the Fehmarnbelt with associated landworks in Denmark and the Corporation Tax Act.

The Acts can be viewed at the Danish Parliament’s website: www.ft.dk

The Act on the construction and operation of a fixed link across the Fehmarnbelt with associated landworks in Denmark” authorises Femern A/S and A/S Femern Landanlæg to construct and operate a fixed link across the Fehmarnbelt and associated landworks in Denmark.

The coast-to-coast project will be implemented as a four-lane motorway with emergency lanes in both directions and a double-track electrified railway running through an approximately 18 km long immersed tunnel. Toll facilities will be located on the Danish side of the tunnel.

The upgrading of the Danish railway landworks will include the expansion of the Vordingborg to Masnedø and Orehoved lines to the south of Holeby to double track. The lines from Ringsted to Masnedø and from Orehoved to south of Holeby will be electrified and upgraded to allow passenger trains to travel at up to 200 km/h. Finally, there will be a new double-track bridge over Masnedund and a single track bascule bridge over Guldborgsund. Banedanmark is expected to be given the role of developer of the Danish railway landworks.

As shown in the comments to the Construction Act, the reassessment of the overall economics of the project, including an updated risk assessment, will be submitted to the political parties behind the Fehmarnbelt project in the autumn before construction work can begin. The political parties will, in this context, also have to consider the further progress of the project in the event that the German regulatory approval is not yet available. Reference is made in this respect to the general comments on the bill, section 11.2.1.

The Act amending the law on Sund and Bælt Holding A/S, the Act on the planning of a fixed link across the Fehmarnbelt with associated landworks in Denmark and the Corporation Tax Act repealed the special tax regulations, which currently affect Sund & Bælt Holding A/S, A/S Storebælt, A/S Øresund, Femern A/S and A/S Femern Landanlæg. These special provisions deal with loss carry forwards, depreciation rules and tax exemption on free transfer of loans between the companies. The repeal of the special rules means that all companies in the
Group should follow the general tax rules from 1 January 2016. The rule change is not considered to have any particular financial impact on the Group companies.