

THE WORLD'S GATHERING PLACE FOR ADVANCING CONCRETE

SUNDAY, NOVEMBER 3, 2024 11:30 AM – 1:30 PM \$50 USD PER PERSON

The Fehmarnbelt Link: The World's Longest Immersed Tunnel

The Fehmarnbelt Link will be the world's longest immersed tunnel and one of Europe's largest-ever construction projects. The Link will comprise an 18 km long reinforced concrete immersed tunnel connecting Rødbyhavn in Denmark with the island of Fehmarn in Germany, with associated landworks on the Danish and German sides. The tunnel is a combined road and rail tunnel with four traffic tubes, a central gallery, and a total width of 42 m. Special elements at 1.8 km intervals have a basement level containing mechanical and electrical equipment.

Construction of the Fehman belt Link started in 2021 and is expected to be completed in 2029. The tunnel will make it possible to travel between Hamburg in Germany and Copenhagen in Denmark by train in less than 3 hours, which is 2 hours shorter/quicker than the current rail journey and comparable to the flight time.

The Owner is Femern A/S, a private limited company 100% owned by the Danish Ministry of Transport. The Fehmarnbelt Link is financed according to the Danish state guarantee model, also used to finance the other major fixed links in Denmark across the Great Belt and Øresund. The model is based on financing the construction through state-guaranteed loans, which will be repaid over time with revenue from future users of the tunnel.

The Rambøll-Arup-TEC Joint Venture (RAT) has supported the Owner since 2009. In this presentation, Mike Needham, RAT's Immersed Tunnel Contract Team Lead, will discuss the development of this spectacular project from its early design phases through to its current state of construction.



Mike Needham, BA (Hons), CEng, FICE, Immersed Tunnel Contract Team Lead, Rambøll-Arup-TEC Joint Venture

The ACI Concrete Convention will take place at

the Philadelphia Marriott Downtown in Philadelphia, PA, USA, November 3-6, 2024. Visit **www.aciconvention.org** to register for the International Lunch!