

# COWI Company Presentation

## BTM: Bridge – Tunnel - Marine

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Project Director, Major Bridges International

1 | 19 SEPTEMBER, 2017  
COWI INTERNATIONAL PRESENTATION

COWI



History

## Founded with a passion for knowledge



**1930**, Copenhagen, Denmark  
Christen Ostenfeld, a young engineer, designs the largest night club in Scandinavia and establishes the foundation for COWI.

**1946**, Copenhagen, Denmark  
Engineer Wriborg Jønson becomes a full partner and the company is named "Chr. Ostenfeld & W. Jønson, Rådgivende Ingeniører" – in short: COWI.

Group overview

## COWI today



2016 net  
turnover:  
USD **1,050 M**

Approx. **6,500**  
employees

World-class  
competencies within  
**engineering,  
economics and  
environmental  
science**

At any given  
time, **13,000**  
ongoing projects

**85** years of history

# A selection of our global Bridge, Tunnel and Marine projects



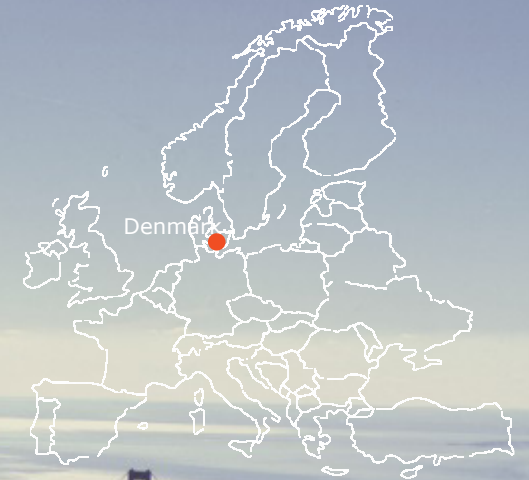
# Bridges in COWI



# Design Philosophy – Improve the Quality of the Built Environment

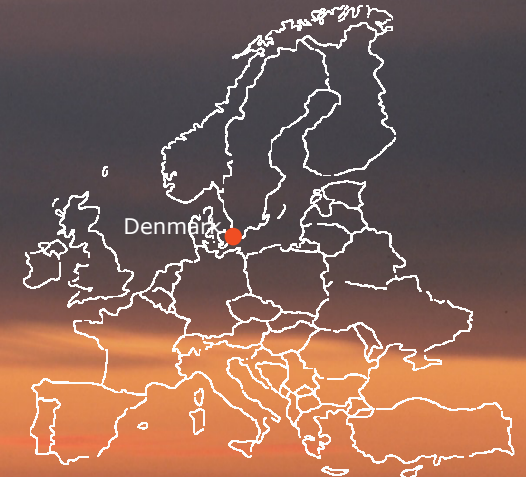
- > Efficiency of design – Functionality, impact, structural efficiency, construction, life cycle
- > Aesthetics as an integrated part of the design
  
- > Constructability – COWI's designs get built
  
- > Durability
- > Operation & Maintenance
- > Life cycle cost
- > Structural Health Monitoring – protect the investment
  
- > The quality is built into the structure right from the design process and through construction!

# Great Belt, Denmark



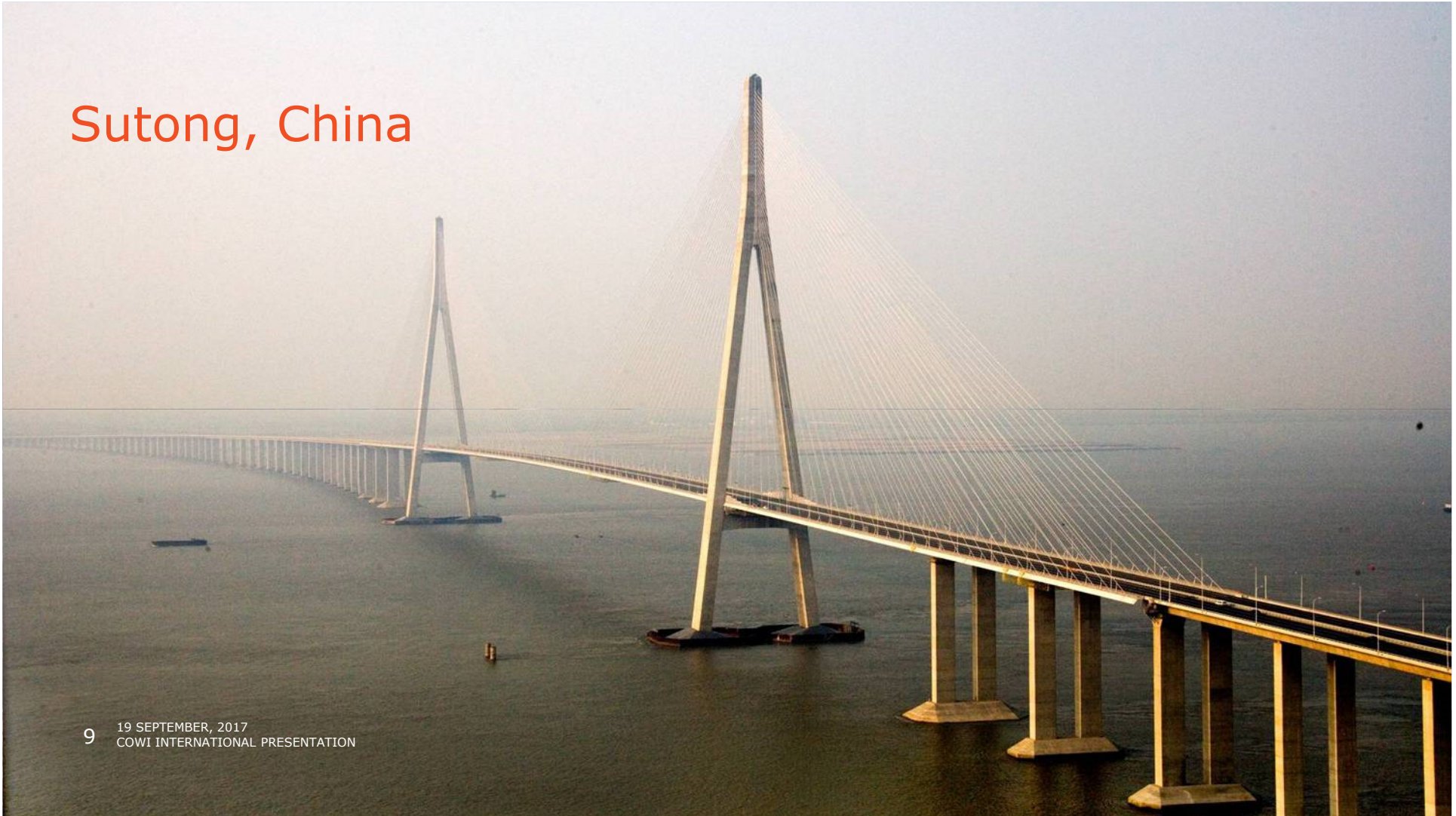
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# Öresund, Denmark-Sweden

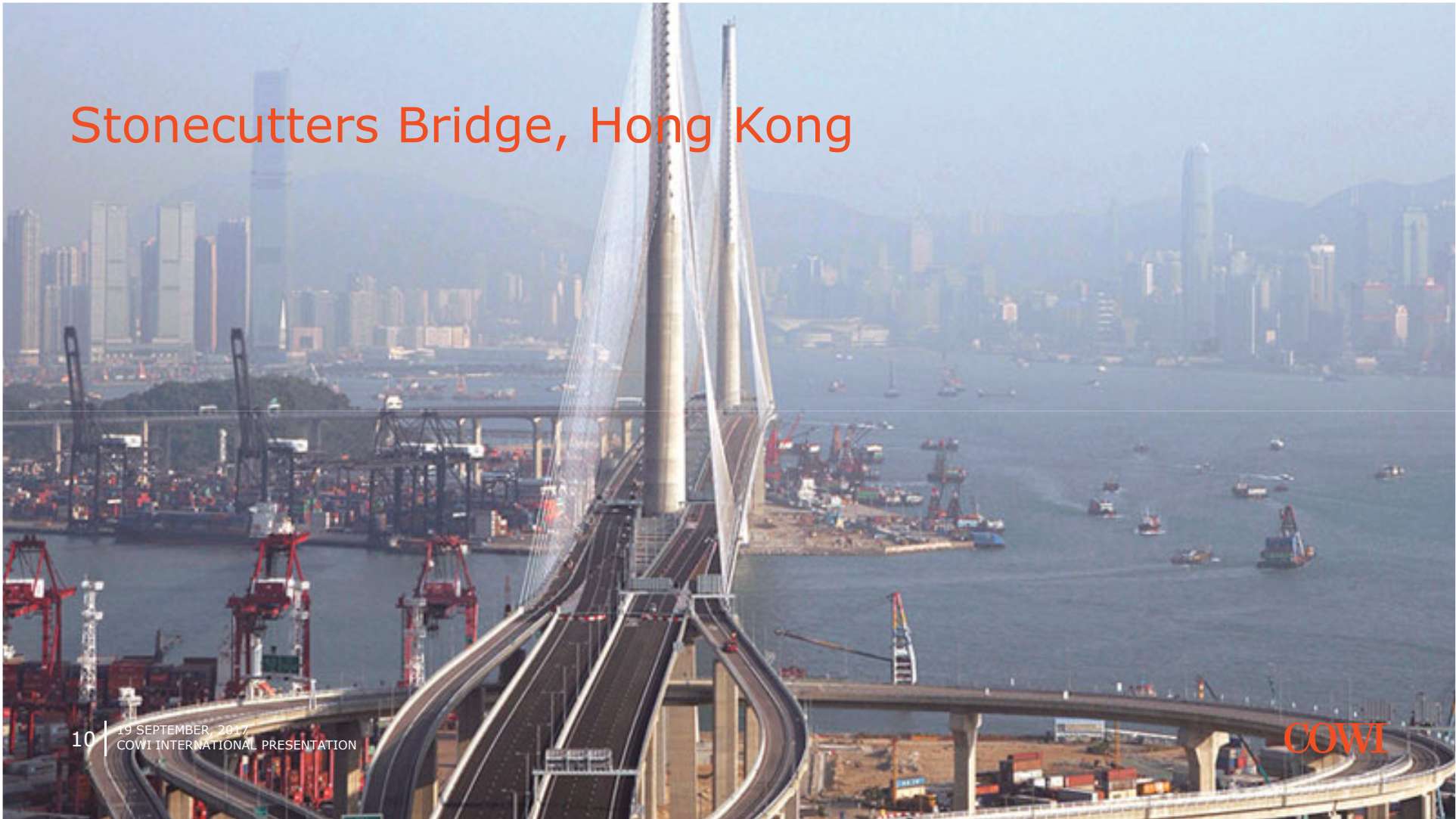




# Sutong, China

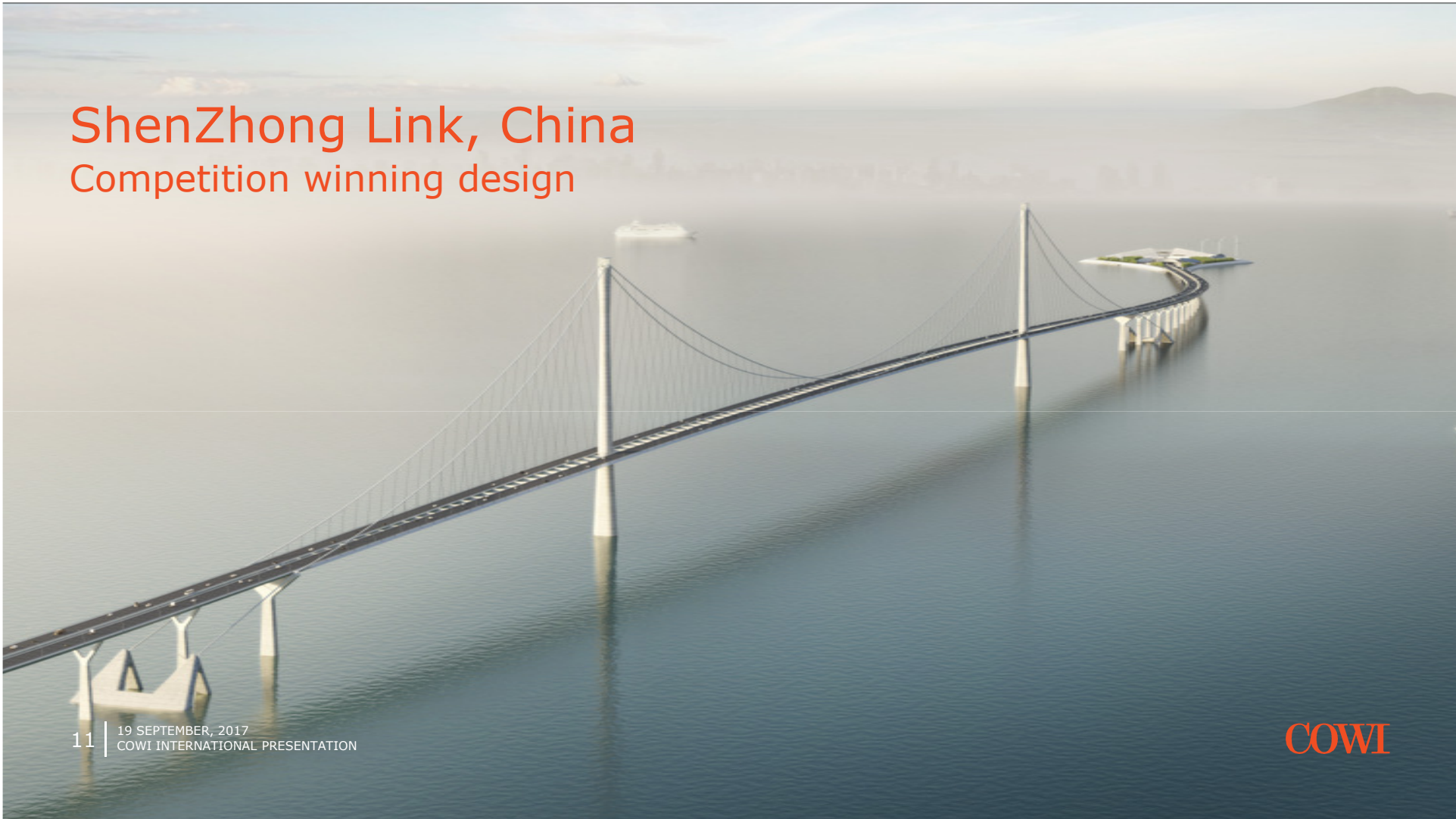


# Stonecutters Bridge, Hong Kong

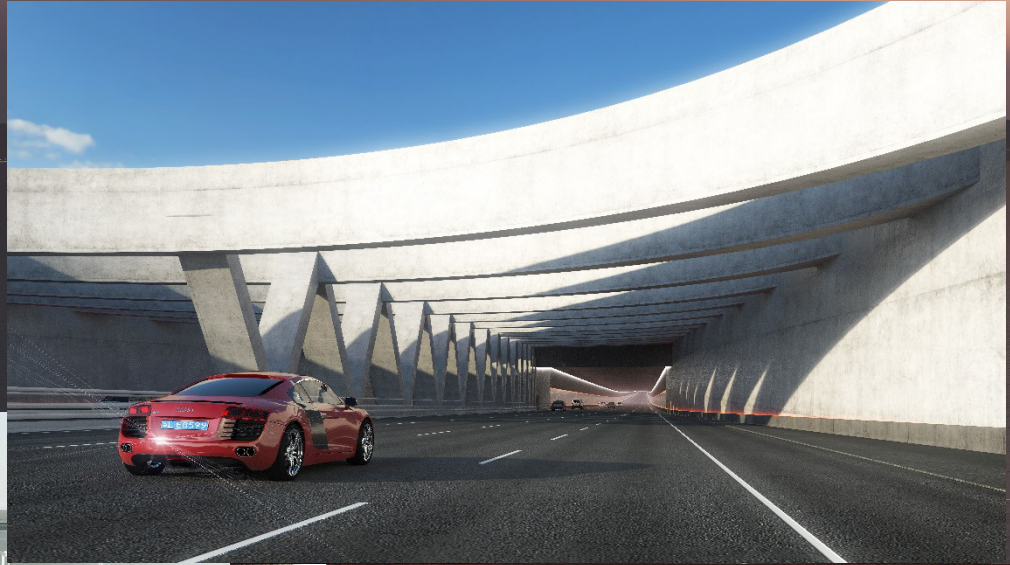
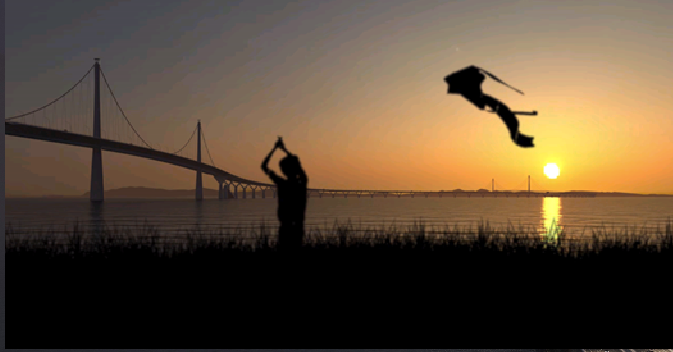


# ShenZhong Link, China

Competition winning design



# ShenZhong Link, China



# ShenZhong Link, China



# Osman Gazi Bridge, Turkey



# 3<sup>rd</sup> Bosphorus Bridge, Turkey



# 1915 Çanakkale Bridge

World record main span = 2023 m





# Hålogaland Bridge, Norway

Sichuan Road and Bridge Group (steelwork)



# KaTembe Bridge, Mozambique



# Constantine Viaducts, Algeria



# Busan-Geoje Fixed Link, Korea

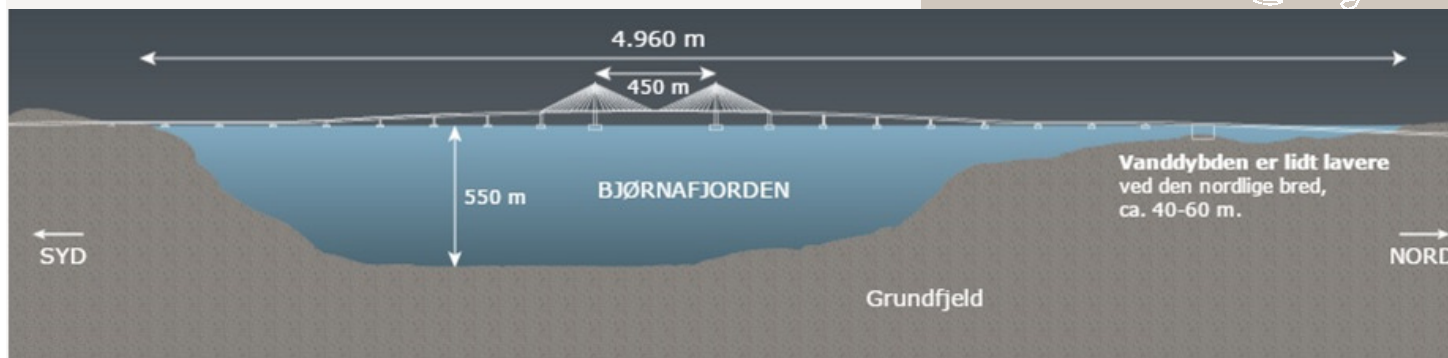
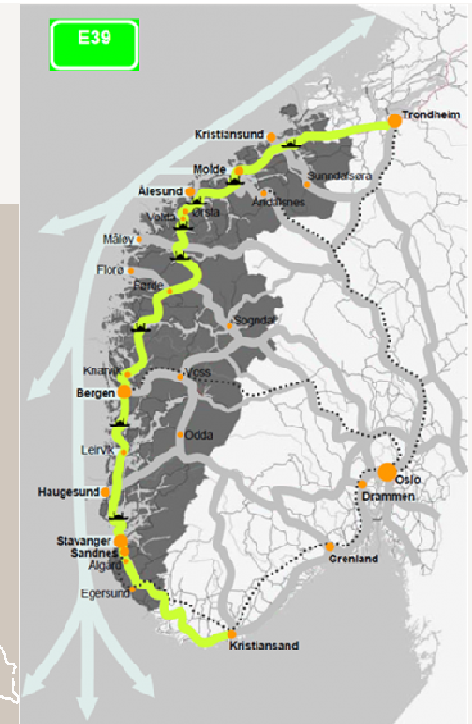


# Cebu-Cordova Link Expressway, Philippines



## Ferry Free E39, Norway

- > 2016: 1100 km, 8 ferries, 21 hrs
- > 2040: 0 ferries, 13 hrs
- > Total budget estimated to US\$ 25 billion over 20 years

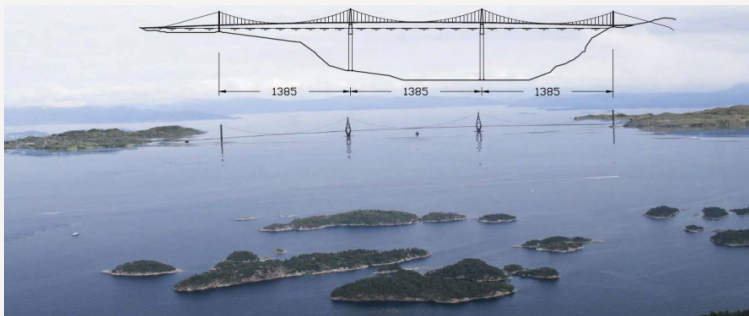


COWI

## Bjørnafjorden, Norway

**3 different concepts are being considered for the crossing**

- > Floating bridge with cable stayed main bridge
- > 3-span suspension bridge with central TLP's
- > Tubular Bridge (submerged tunnel)



# The Americas



# Salvador-Itaparica Project, Brazil



# Puente Centenario, Panama (2004)



# Puente Nigale, Venezuela (ongoing)



# Puente Nigale, Venezuela (ongoing)



# Chacao Bridge, Chile (ongoing)



A close-up photograph of a diver in a yellow and blue diving suit. The diver's face is visible through a large, circular porthole. The diver is holding a grey stuffed animal, possibly a bear or a dog, in front of the porthole. The scene is set in choppy, blue water with sunlight reflecting off the surface.

Thank You