



# BRITISH TUNNELLING SOCIETY

Thursday 16<sup>th</sup> January 2020 at 6.00pm

At The

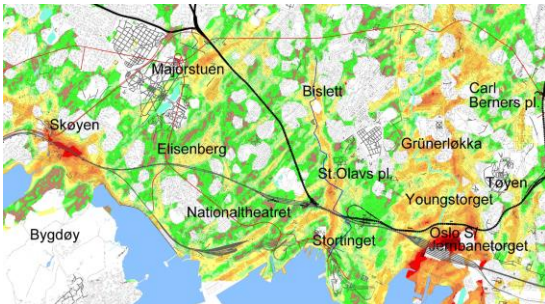
INSTITUTION OF CIVIL ENGINEERS  
ONE GREAT GEORGE STREET, WESTMINSTER, LONDON SW1P 3AA

## Technical Challenges with Future Tunnels in Norway

### “Under the City of Oslo and Deep Fjords”

MSc Anne Kathrine Kalager – Project Mngr TBM Follo Line, Bane NOR

Professor Eivind Grøv – Chief Scientist, SINTEF



Norway has more than hard rock tunnelling. Under the city of Oslo you can find quick clay, black shale and a huge mix of different good and poor rock. In the middle of the existing infrastructure, we still plan for a new metro line, new railway line and tunnels for water, sewage and power cables. MSc Anne Kathrine Kalager will present the challenges, experiences and possible solutions for urban tunnelling in Oslo.

In the more rural part of the country, we open the world's longest and deepest subsea road tunnel on the 30<sup>th</sup> of December 2019. And we plan for an even longer and deeper tunnel on the western coast of Norway. Professor Eivind Grøv will present the challenges, possible solutions and the latest research regarding subsea tunnels and other larger infrastructure projects along the coast.

Tea and biscuits will be available at 5:30pm

**Advance booking not required**

In case of any query please contact; The Secretary, BTS Tel: 020 7665 2229

or e-mail: [bts@ice.org.uk](mailto:bts@ice.org.uk)

or visit: <http://www.britishtunnelling.org.uk>