

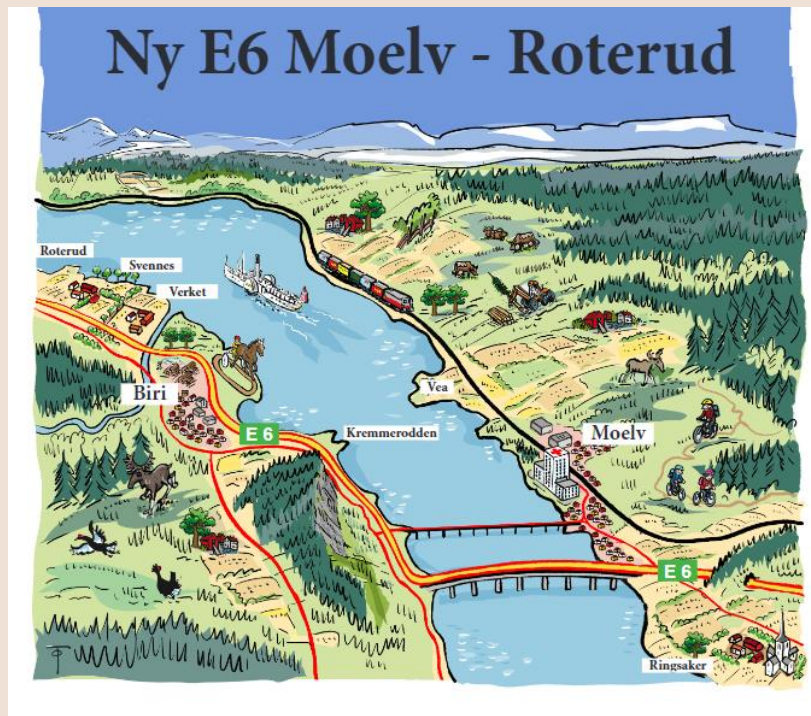


3D Ultra High Resolution Seismics in a confined lake environment, Mjøsa, Norway

Senior Geophysicist
COWI A/S

Agenda

Aim of the investigation
Site challenges
Designing the platform
Survey operations
Final 3D model



Aim of the investigation

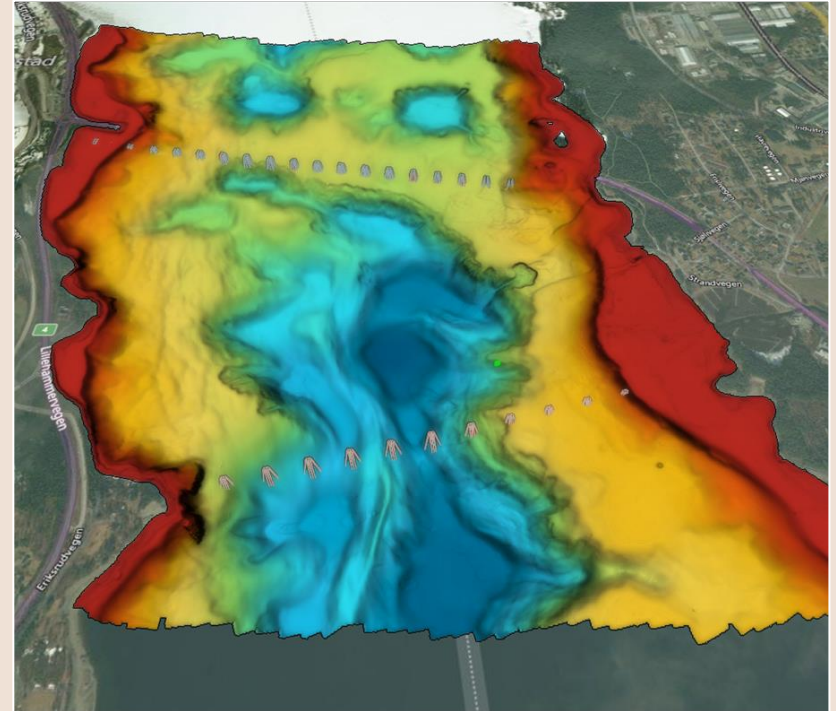
High resolution 3D geological model

Seismic velocity model

Boulder picking

Cover the areas where geotechnical drilling was limited

Chosen method: 3D Ultra High Resolution Seismics



Site challenges

Shallow water/no water
Low tunnels
Small harbours

The solution
Small vessel with modular extension platform for
land transport

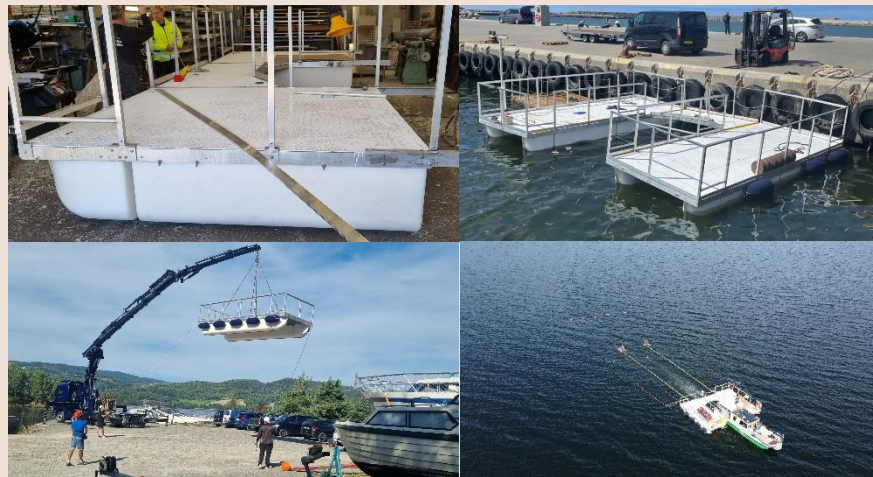


Designing the platform

Close collaboration with sub-contractors
Focus on stability, safety and comfort

The result

Light-weight shallow draft modular platform
Fully stability tested to maritime standards



Survey operations

High quality data
No incidents
Good management of limited deck space

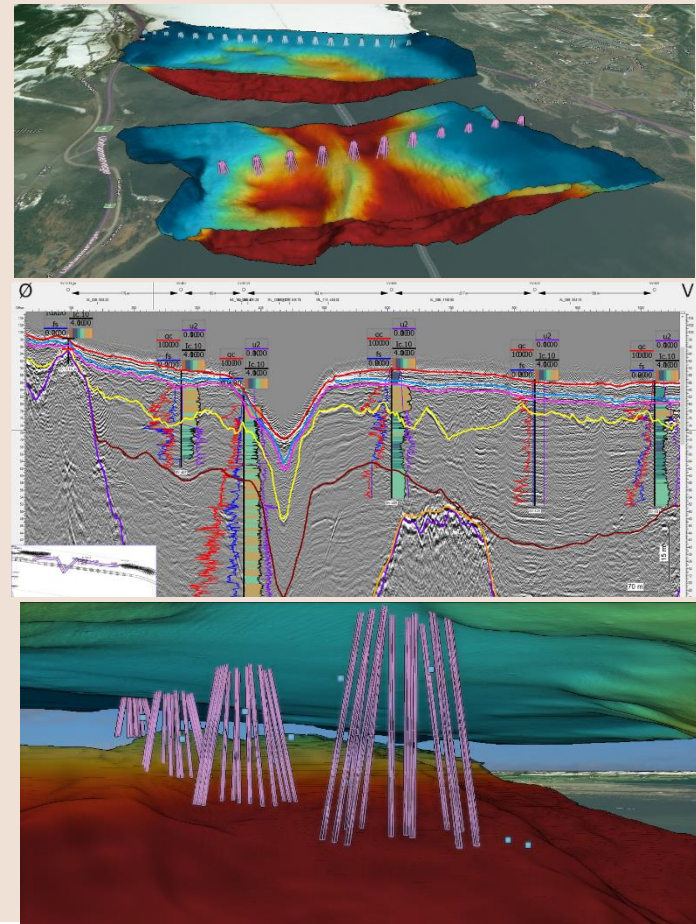


Final 3D model

Cubed seismic datamodel – flexible profiles

Boulder picking down to a size of 0.6m

Highly detailed 3D model for geotechnical engineers



Acknowledgements / Thank You / Questions



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