

BritNed Interconnector Project Dredging Costs Study

The BritNed Interconnector is a potential major new power cable which would link the UK with the Netherlands. Svašek Hydraulics has executed various studies for the BritNed project. One of these is the Dredging Costs Study for different route alternatives in the Dutch sector.

This study deals with the planning and cost aspects of the dredging activities for the installation of the cable. The sandwaves along the proposed cable will have an impact on cable lay strategies and burial depth of the power cable. Dredging may be necessary to assure the equipment will not be halted by critical slope of the sea bed or that the cable will become exposed after some years due to moving sandwaves.

First the dredging volumes for various cable burial options are determined. For different cable burial options and Trailing Suction Hopper Dredger classes (maximum hopper content varying from 3,500 to 23,000 m³) the dredging productions have been calculated taking into account the variation in dredging depth along the routes. With these dredging productions the total costs and cost per cubic meter sand for each combination of burial option and dredger size has been determined.

In a separate study the dispersion of silt during the dredging and dumping operation was determined by 2D plume modelling (FINEL).

Client

BritNed (joint venture between National Grid and TenneT)

Location North Sea

Date 2002 - 2004

Services

Physical subdocument EIA, Sandwave behaviour and morphological analysis, Plume disposal study (FINEL), Cable burial study, Dredging costs study

> Associated Firms METOC plc. Royal Haskoning

