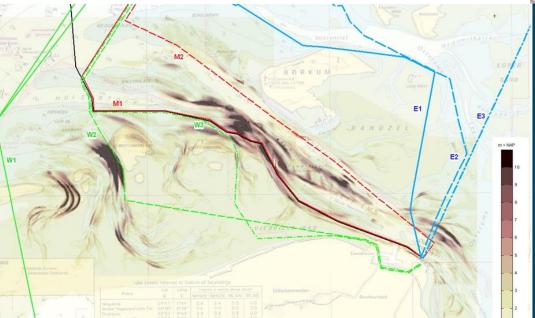
## COBRA POWER CABLE TECHNICAL CABLE ROUTE ASSESSMENT

TenneT TSO has requested Svašek Hydraulics to study the possibilities of cable laying and burial methods and route alternatives for a 700 MW High Voltage Direct Current (HVDC) cable between Denmark and The Netherlands. The purpose of the link, entitled COBRA (COpenhagen-BRussels-Amsterdam), is to facilitate for the integration of more renewable energy into the Dutch and Danish power systems and to increase security of supply.

The Dutch side of the cable will be connected to the converter station in the Ems-harbour. From there the cable has to cross the Dutch Wadden Sea, the Ems tidal inlet or the German side of the Wadden Sea towards Denmark. Nine route alternatives have been compared on technical aspects which have been translated into costs. This resulted in an overall assessment on the viability of the route alternatives.

For the study an assessment of the newest developments in cable burial and laying techniques is made which is used for the overall assessment. GIS package ILWIS is used to integrate the geospatial analysis in the route assessments.



CLIENT

TenneT TSO

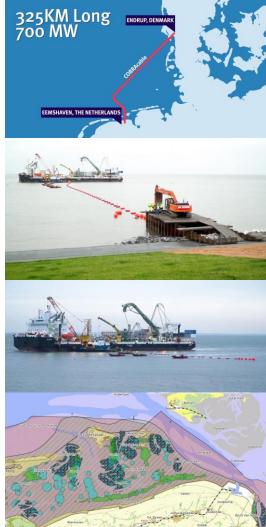
LOCATION Eastern Wadden Sea, Netherlands

DATE

2009

## SERVICES

Analysis criteria and assumption, cable laying and burial methods, GIS analysis routes, overall assessments of route alternatives.



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