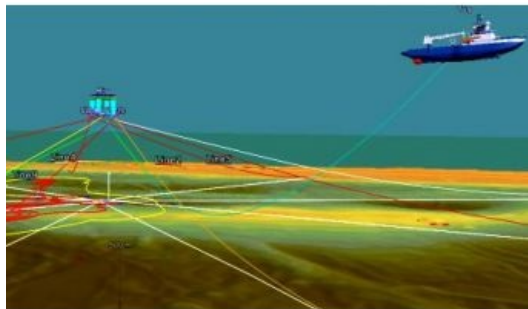


# NaviCat Software for Catenary Simulation



NaviCat software is able to execute catenary simulations related to anchor handling tug operations through integration with EIVA NaviPac including 3D visualisation option. By utilising predefined cable, MLB and anchor libraries NaviCat makes creation, modification and display of catenaries extremely easy and intuitive.

Each library allows for maintenance and extension by the user. During catenary simulation cable types, MLB's and anchors can be replaced / exchanged dynamically and the effect is displayed instantly to the user. Defined project files can be stored by the user for later re-use of specific set-ups.

Display of catenaries is supported by tools including a/o zooming, measurement, automatic arranging of catenary profiles, drag-and-drop and dock able windows. In NaviCat each catenary is illustrated as a profile along the catenary in a customizable 2D profile display. Visualisation of catenaries in 3D is handled through integration of NaviPac 3D visualisation module.

During catenary simulations a large number of parameters for the catenary can be displayed, such as TDP, tension and angle at fairlead, tension along catenary, total length, position of anchor and MLB's, estimated anchor position, display tension alarms along the catenary and much more.

NaviCat can operate in three modes, Manual, Calculation and Online mode. In Manual mode NaviCat is used as a planning tool where the impact of different set-ups is easily monitored and visualised. Calculation mode is used for estimation of anchor or TUG positions based on a specified tension or angle at the fairlead. In Online mode NaviCat integrates with NaviPac which provides positions and status information about the catenaries including 3D views.