

Eni Tests AUV for Environmental Monitoring



An AUV designed to carry out subsea environmental monitoring along predetermined tracks is being tested by Eni Norge. Together with its subsidiary Tecnomare, Eni Norge has completed the research and development project "CleanSea". The development of an AUV, carrying out sampling which is important as part of monitoring the marine environment, was one of the aims of the project.

The AUV is equipped with multiple propellers, enabling it to stop, hold its position and adjust its movements as required and in response to sensor data. It is pre-programmed and carries out the job it is asked to do.

The robot is equipped with a high resolution video camera and lights, a methane sensor, a leakage detection hydrophone, and a fluorescence sensor to detect hydrocarbons and trace substances. It will also map the sea floor and take water samples. It is the last of these functions that was tested in Hammerfest harbour.

Eni Norge is also working on a technology which utilises subsea systems controlled from land without support offshore. The aim is to expand the existing network used by remotely-operated oil and gas wells with the help of an optical network which transmits data at high speeds using light. This will make it possible to receive live images and data, provided that the vehicle is within range of a transmitter.

The AUV is supplied by Saab Seaeye in Sweden, which develops a great deal of equipment for naval and oil industry applications. It is 3.8m long, 1.4m wide and weighs 1,300kg. It is capable of working at depths of up to 3,000 metres and has a top speed of 4 knots.

Image: AUV test in Hammerfest (Image courtesy: ENI).