

# Fugro to Collect Data for Norwegian Seabed Mapping Programme



Fugro has been awarded a hydrographic survey contract, valued at NOK 44.7 million (approximately €4.7 million), by the Norwegian Hydrographic Service. The survey is part of the MAREANO seabed mapping programme, which is financed by Norway's Ministry of Trade, Industry and Fisheries, and the Ministry of Climate and Environment. Fugro has successfully completed numerous surveys for the programme since 2006, collecting more than 100,000 square kilometres of data.

In water depths that typically range from 80 metres to 1,700 metres, the survey area of approximately 14,500 square kilometres is located between the Norwegian Sea, the Barents Sea and the Arctic Ocean. Fugro's equipment on the survey vessels, including *MV Victor Hensen* and *MV Fugro Gauss*, will collect high resolution, high density

multibeam echo sounder data, together with sub-bottom and gravity meter data, to gather marine knowledge for the Norwegian mapping programme. The fieldwork is scheduled from June to November this year.

## Bathymetry and acoustic backscatter

The main objective of the survey is to collect seamless, high quality datasets between bathymetry and acoustic backscatter. To achieve this, Fugro is deploying state-of-the-art-sensors and adopting advanced calibration techniques and oceanographic measurement workflows designed for this challenging environment. It is also utilising online monitoring QC and post-processing workflows.

Dr Marco Filippone, chief hydrographer at Fugro, explained the benefits of the company's long-term experience on the MAREANO programme, "Over the last twelve years we have deployed our specialist multibeam echosounder equipment and applied our IHO certified hydrographers' expertise on several surveys for the Norwegian Hydrographic Service under this programme. It is very gratifying to be able to deliver continuous development in line with their objectives and expectations."

## Ice-Pad solution

With part of the survey area located above 80 degrees latitude, there is an opportunity for Fugro to test the "Ice-Pad" solution from MARSAT, the consortium developing services for the maritime and coastal industry. Collecting the most recent information on ice coverage will assist the MARSAT project to support voyage planning and tactical navigation in limited bandwidth conditions, typically at higher latitudes.

This year Fugro is introducing another additional element which will bolster its ongoing contributions to crowdsourcing initiatives such as the Nippon Foundation - GEBCO Seabed 2030 project, the global initiative to produce a high-resolution map of the world's ocean floor by the year 2030. To date Fugro has donated almost 100,000 square kilometres of bathymetric data, collected during transits to and from global survey areas, to Seabed 2030, and aims to boost this contribution with transit data from the MAREANO programme.