

# Offshore Geophysical Survey Services

Horizon can perform geophysical and hydrographic surveys in order to:

- **Determine seabed and sub-seabed conditions**
- **Profile geological features and detect geohazards**
- **Chart the seafloor**
- **Locate man-made and natural objects including debris, shipwrecks, ordnance, subsea structures and coral reefs**
- **Provide a seafloor and sub-surface geophysical assessment**

The geophysical information gathered is required prior to the design and installation of subsea pipelines and offshore structures. Hydrographic surveys are carried out to chart the seafloor and can be used for navigation or engineering and design purposes. A comprehensive array of survey sensors can be deployed depending on the client's requirement and the nature of the work.

Horizon operates a fleet of owned and long term charter vessels mobilised for a variety of survey roles capable of landfall to deep water survey depths, equipped with swathe bathymetric, side scan sonar, sub-bottom profiling, magnetometer and towed acoustic arrays for shallow seismic and high resolution surveys. Horizon can also provide Autonomous Underwater Vehicles (AUV), working independently to the vessel, to increase the daily survey coverage and allow survey in shallow water areas.

The geophysical survey vessels operated by Horizon can also be equipped with observation class Remotely Operated Vehicles to visually inspect debris identified during the survey operations.



The geophysical survey vessels operated by Horizon are equipped with complete processing and reporting capabilities. This allows for seamless integration of the data sets which are processed, interpreted, reported and charted onboard the vessels.

As well as traditional hard copy charts and reports, electronic deliverables can be provided to the client in a variety of electronic formats including:

- **PDF copies**
- **CAD charts in client's required format**
- **GIS systems (as a turn-key solution or to be incorporated into a client's existing system)**

GIS deliverable can be given in client format or in line with OGP/IMCA Seabed Survey Data Model (SSDM) format.

Horizon maintains market leading Quality Assurance systems and practices being awarded the following ISO certificates:

- **ISO 9001:2008**
- **ISO 29001:2007**

Horizon provides these services for:

- **Pipeline and cable route surveys**
- **Rig and platform site surveys**
- **High resolution seismic surveys**
- **Large scale mapping / hazard surveys**
- **Nearshore geophysical and bathymetric surveys**
- **Environmental surveys**

