HGIS provides support for offshore structure installation which includes pre-installation geophysical survey and high accuracy positioning & navigation during the structure installation.

Our solutions can support any type of structure installations for:

- Four-Legged Jackets
- Tripod Jackets
- Monopod Jackets
- Topsides
- Living Quarters
- FPSO/FSO/FSU

**FEATURES**

- Precisely determine the general bathymetry within the survey area.
- Identify any naturally-occurring seabed obstruction or hazard.
- Determine and delineate possible sub-seabed features that may pose a constraint or hazard in foundational implication.
- Acquire, inspect and delineate shallow, sub-seabed geological structures and soil variations.
- Identify any major obstacles and existing pipelines or other seabed installations which include any debris or obstacles that could hinder the installation of the jacket/platform.
- Identify and locate and set buoys to mark existing pipelines and other underwater Installations in the area of the work.
- Precise Positioning and Navigation support during lifting, float, upend and emplace jacket to the seabed.
- Support in touchdown monitoring for installation/driving of piles.
- Jacket levelling, pile cut-off and pile transition piece installation.
- As-built jacket survey.
- As-built Topside Module Decks Survey.
PRE AND POST INSTALLATION SITE SURVEY

HGIS’ flexibility in various modes of acquisition marks our expertise in geophysical survey. By understanding the geological and geophysical characteristics of the site location, we can decide which methods and equipment are best used to attain the highest quality of data. This translates into more accurate results and faster surveys, thus cutting down on time and cost.

BENEFITS

- Dual simultaneous frequencies Side Scan Sonar with Full Spectrum CHIRP technology providing higher resolution imagery up to 50% or greater.
- Towed Sub-Bottom Profiler with Full Spectrum CHIRP Technology which is ideal for quick deployment and weather prone operations.
- Reson Seabat 7160 Multi-Beam Echo sounder operating at 44kHz. Suitable for water depth up to 3000m.
- Teledyne Odom’s ECHOTRAC MKIII Single-Beam Echo sounder with selectable receiver bandwidth for shallow/deep water.
- Towed Sub-Bottom Profiler with Full Spectrum CHIRP Technology which is ideal for quick deployment and weather prone operations.
- Reson Seabat 7101/ 8101 Multi-Beam Echo sounder operating from 240kHz suitable for water depth up to 300m.
- Reson Seabat T20P Multi-Beam Echo sounder operating from 200 - 400kHz variable and steerable swath suitable for water depth up to 80m.

We also can provide other non-CHIRP Technology Side Scan Sonar tools such as Geo Acoustic System and C-MAX SSS System.

- GeoAcoustic GeoPulse Pinger SBP side-mounted to the vessel for close proximity to structures.
- Reson Seabat 7101/ 8101 Multi-Beam Echo sounder operating from 240kHz suitable for water depth up to 300m.
- Reson Seabat T20P Multi-Beam Echo sounder operating from 200 - 400kHz variable and steerable swath suitable for water depth up to 80m.

PLATFORM JACKET/TOPSIDE INSTALLATION

BENEFITS

- Precise Positioning
  Precisely position the jacket within the desired tolerances.

- Current Monitoring
  Real-time current monitoring prior to and during installation of the jackets.

- Determine Mean Sea Level
  Provide direct reading tide gauge to determine MSL and consequently the elevation of the jackets and decks.

- Transition Piece Cut-off
  Determine and mark the transition piece cut-off based on the design elevation.

- Final Confirmation
  Determine the final as-built position.

OTHER RELATED SERVICES

- Offshore Structure Decommissioning Support Services
- Subsea Christmas Tree Installation Support
- BMS & TMS positioning support for 4/8/9 mooring anchor (FSO, Work Barge, Work Boat)
- ROV Underwater Positioning and Tracking Support
- FPSO/FSO/FSU Mooring Installation