



# 'Content;

Introduction-2
Corporate Mission-3
Team - 4
Hydrographic survey - 6
Engineering Services- 7
Sub-sea Operations -8
Procurement and Supply-9
Contact-10



# Introduction

**Muels Tech Limited** is a company incorporated in the year 2010 to render strategic Onshore/Offshore services. The company is incorporated under the Companies and Allied Matters Act 1990 of Nigeria to provide Hydrographic Survey, Surface/Sub-sea Positioning, and Engineering Services as a player for oil and gas companies in Nigeria.

Our skilled personnel uses the huge acquired data efficiently and costeffectively, using innovative and modern technology. Our equipment is of the highest standard, is regularly maintained and we continually challenge ourselves to push industry capabilities.

We are an innovative consortium endowed with resources in line with the intellectual constructive capabilities and capacity required to undertake precise Hydrographic survey, Surface/Sub-sea, and engineering services within the oil & gas sector.

Muels is also a supplier of manpower and equipment to the offshore survey and ROV markets. We can supply one person or complete teams of Surveyors, Engineers, and Project managers for the short or long-term.

**Muels** is well structured to ensure a safe working environment and accidents diminishable in our operations.





## **Corporate Mission**

Qualitative and affordability.

In our operations, our objective is to consistently exceed the expectation of our clients.

Quality and Reliability - Our key.

### **Safety**

- ✓ Your responsible for your safety and that of your colleagues.
- ✓ Always follow the correct procedures.
- ✓ Never take shortcuts.
- ✓ Take responsibility and clean up if you made a mess.
- ✓ Clean and organize your workspace.
- ✓ Ensure a clear and easy route to emergency exits.
- ✓ Be alert and attentive at all times to your work surroundings.
- ✓ When in doubt, contact your supervisor or manager for instruction and guidance.
- ✓ Never take risks when it comes to safety.
- ✓ Obey safety signs, stickers, and tags.
- ✓ Take short breaks when you keep up a repetitive motion for a long period of time.
- Report all unsafe conditions and injuries immediately.
- No alcohol and the use of drugs.

#### **Business Ethic**

The core of the ethics and compliance program is our Code of Business Conduct at **Muels**. The Code guides our business conduct, requiring honesty and integrity in all matters. All of our associates and directors are required to read and understand the Code and follow its precepts in the workplace and larger community

Our Code of Business Conduct serves to guide the actions of our employees consistent with our Company values. The Code helps our people do the right thing and play by the rules wherever we operate around the world.

"Excellence is never an accident; it is always the result of high purpose, sincere effort, intelligent direction, and skillful execution; it represents the wise choice of many alternatives."



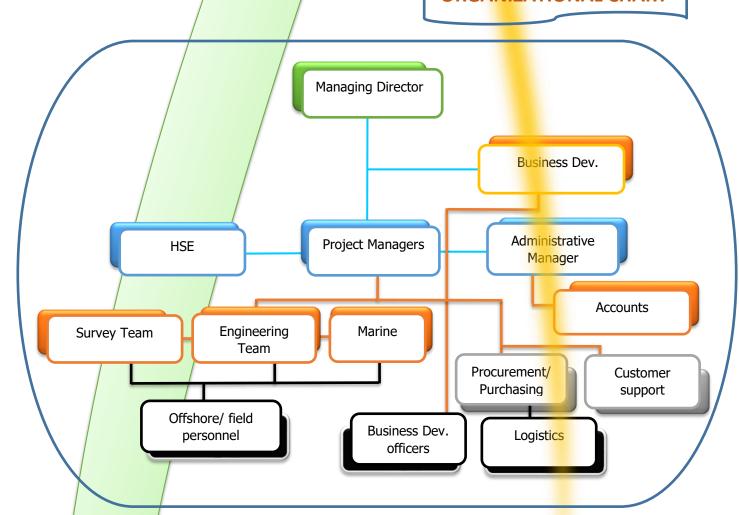
#### Team...

Highly skilled professionals assigned to projects will ensure that work is executed to the highest standards and follows both the applicable industry specifications and procedures.

It is our responsibility at Muels Tech Limited to ensure that quality control is being adopted as a 'Frame of Mind' by providing according to schedule within the budget so to fit the purpose, set up aiming flexibility and adaptation to client's needs.



## **ORGANIZATIONAL CHART**

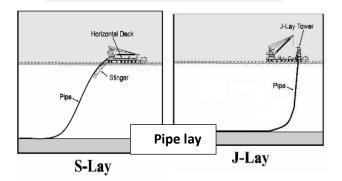




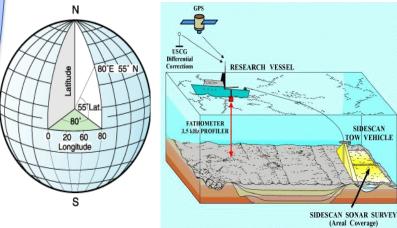
#### **Our Services:**

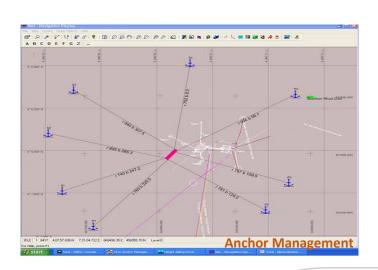
- 1. Positioning Engineering (Positioning of Vessels, Tankers, Barges and drilling Rig Moves (Jack-ups, Semi Sub and Anchor positioning).
- 2. Dive support solutions.
- 3. Pipeline and cable installation support services including Tug/Anchor management Systems.
- 4. Construction support (Pipe lay, cable installation, Jacket / platform and subsea installation.
- 5. Sand Search Survey, Core of Sand Mining and Dredging support.
- 6. Submarine cable Route Surveys and Burial Assessment Surveys (BAS).
- 7. Full spread geophysical survey (Hazard analysis survey, geotechnical survey etc.) And Digital (seismic) Surveys Geophysical/ Digital Surveys and removal of debris.
- 8. Gas/oil pipeline pre, post Lay and route site surveys.
- 9. WROV subsea inspection/Intervention support.
- 10. Coast line/shore line survey and chart up.
- 11. GIS, Data interpretation and reporting.
- 12. Equipment rentals, repairs and Consultancy

# **Hydrographic survey services**





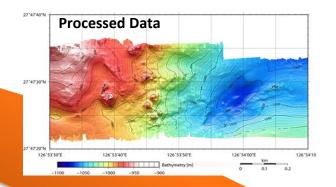






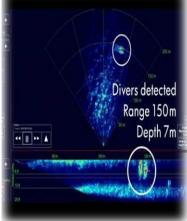


# Offshore Seismic Survey









## Hydrographic Survey & Positioning

**Muels** provides various survey services, including hydrographic, sub-bottom, geophysical, and sediment sampling services of seas, rivers, harbors, or lake bottoms to ensure safe navigation and for oil and gas exploration

- Hydrographic Survey Services
  - ✓ Single Beam Acoustic Bathymetric Survey
    As the most widely used bathymetric survey
    technique for years now, Single beam bathymetric
    survey is a relatively low-cost method, however, can
    provide highly accurate water depth information.
  - ✓ Muels provides a high-resolution single beam acoustic bathymetric survey service for rivers, ponds, lakes, and coastal environments.
    Multi-beam Acoustic Bathymetric Survey
    The use of multi-beam acoustic surveys in hydrographic mapping has become increasingly common and accepted. Unlike a single-beam acoustic survey, a multi-beam acoustic survey acquires bathymetric sounding across a swath of water bottom using a collection of acoustic beams, as opposed to a single beam, which personifies only the area directly below the depth sounder.
  - ✓ Sediment Mapping and Sampling
  - ✓ Pre-/Post-Dredge Surveys
  - ✓ Pipeline inspection
- Geophysical Survey Services
- UAV Mapping Services
- Surface and Subsea Positioning

#### **Equipment**

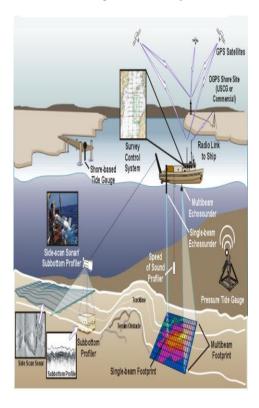
- Side Scan Sonars
- Sub-Bottom Profilers
- Multi and single beam Echo sounder
- Magnetometer
- USBL/LBL
- DGPS
- Pinger
- Streamer
- ➤ AUV/USV



USBL



Geotechnical and Geophysical Investigation Survey



# Structure Installation Support



#### **ENGINEERING AND CONSTRUCTION SURVEYS**

Engineering surveys establish control points by traverse, baseline, or other methods to obtain information required for engineering designs and to set out construction from design drawings by use of these control points. Topographic surveys, and the maps produced by them, provide horizontal location information and elevations needed for the design of structures such as buildings, dams, canals, roads, bridges, power lines, and sewers. Using the engineering designs these works are then laid out from the same control points used in the original engineering surveys.

Construction surveying involves the guidance and supervision of engineering surveying dealing with the laying out and building of highways, bridges, dams, tunnels, buildings, and other structures.

- Mapping and delineating the project area to be reclaimed which in the case of a deepwater port, requires the location of a natural underwater gorge or valley that will not require recurring maintenance dredging. This will serve as a berthing area for ocean liners with large draught, while the island proper will be located adjacent to the gorge on the underwater crest.
- A geological survey of the sub-bottom for soil profiling is necessary to ensure a stable foundation and bearing capacity for the new island. Soil settlement or compaction trend is also determined by surveying methods.
- 3. Locating the sand source and distance from such source to the construction site.
- Determination of vertical rise and fall and horizontal movement of water, current, and wave analysis, to ensure that the island rises above the highest predictable flood level.

#### Pipe/Cable Laying Survey Support

Construction survey support services include:

- ✓ Pipe-lay and Cable-lay positioning and touchdown monitoring
- ✓ Construction barge and support vessel positioning
- ✓ Anchor handling support
- ✓ Structure installation guidance
- ✓ Acoustic underwater positioning
- ✓ ROV survey sensors and system integrations.
- ✓ ROV inertial navigation
- ✓ Jumper and Spool piece metrology
- ✓ Dedicated ROV support vessels
- Project management



#### **SUB-SEA OPERATIONS**

#### ROV Positioning and Inspection Support

Muels has extensive experience providing ROV support services, for various oilfield tasks including Inspection, Touchdown Monitoring, Repair, and Maintenance activities.

Using surface and subsea positioning equipment such as DGPS

and USBL, we can provide a reliable solution for vehicle tracking and positioning. In addition to positioning, **Muels** offers inspection data acquisition and management.

#### Surface Positioning & Anchor Handling

Construction barge positioning including stand-alone vessel positioning and remote anchor management systems. Using high accuracy Differential GPS positioning and heading systems installed on both the barge and anchor handling vessels, WE provide a safe, reliable, and cost-effective solution. With the addition, the remote link can be set up allowing remote monitoring and QC.

#### Subsea Installation Survey Support

**Muels** owns a range of acoustic tracking and measurement equipment, that can be seamlessly integrated into the barge or installation vessel's survey systems.

Combined, Ultra Short Baseline (USBL) and Long Baseline (LBL) equipment provide a high accuracy solution for subsea positioning including ROV operations, diver-less metrology, and spool piece design. For high accuracy positioning of ROV in deepwater environments, Inertial Navigation Systems can be integrated with LBL and other sensors to provide a solution to ansure the client's specifications are achieved.



#### LBL Subsea Metrology

Long baseline (LBL) positioning has many applications both commercially and in research, from surveying a ship hull to positioning offshore platforms in deeper waters. The technique consistently provides accuracies in the order of decimeters over large areas, independent of depth. Recent advances include the integration with other acoustic techniques or with inertial navigation systems for greater levels of accuracy.

LBL metrology services:

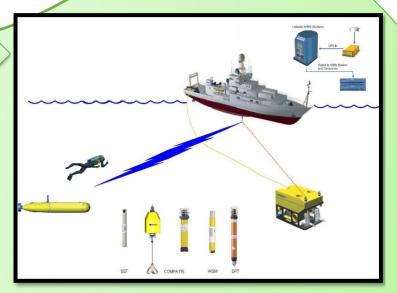
- ✓ Array planning
- Frequency planning
- ✓ By calibration
- High accuracy subsea installation and ROV tracking
- ✓ Spool tie-in
- ✓ Inertial aided acoustic subsea positioning

# SUBSEA POSITIONING SOLUTION



#### Our service:

- ✓ Pre-survey
- ✓ Survey support for upend
- ✓ Piling support
- ✓ Leveling and positioning of the structure.
  - The multi-disciplined experience personnel in the subsea construction industry, allows our teams to be tailored to suit all projects, whilst our management, engineers and personnel are encouraged to be innovative to find our client the best solution.



LBL & USBL Operations



# **Procurement and Supply**

**Muels** is an organization serving the procurement and supply profession. Dedicated to promoting best practices, we provide a wide range of services for the benefit of our clients and the wider business community with the use of our professional network.

Increasing global competition means that organizations in both the public and private sectors need to concentrate on what they do best. Effective procurement strategies and well-managed supply chains enable organizations to do just that: focus on developing and delivering products and services that exceed customer expectations.

We have been contributing to organizations across the public and private sectors to develop effectiveness in the management of costs, and services, raising the recognition of procurement as a driver of efficiency and change. We work with our clients to achieve measurable changes in performance

The benefits of our procurement and supply chain services include:

- Reduced Operating Costs.
- o Increased Procurement Capability.
- o Improved Service Quality.
- Simplified Processes.
- o Fit-for-purpose Procurement Functions.
- o Effective Supplier Management.
- Efficient Freight Forwarder and Clearing Agents
- Warehousing and Stockholding



#### Your challenges

Driving value from your supply chain and procurement processes is increasingly challenging. Identifying areas that offer real cost savings and reduce operating expenses provides the opportunity to reshape your organization. Likewise, simplified processes and increased capability in procurement can free up your resources to focus on creating and maintaining a competitive advantage.

#### Making the difference

Our services are focused on supporting the development of efficient and sustainable supply chains. We will implement effective strategies, optimize supplier bases and help establish supplier relationships that drive results and improve performance.

Our procurement health check provides a complete view of your current procurement organization, processes, spend patterns, and performance in comparison with best practice measurements and world-class approaches. Using the results of the health check we will provide you with a set of practical improvement recommendations for any areas that are not performing effectively. We will help you achieve sustainable improvements in performance

Our procurement services include:

- Comprehensive managed procurement services
- Outsourcing advisory
- Procurement capability health check
- Rapid cost takeout
- Supply chain management and change



#### **Contact us**

#### **Port Harcourt Office**

Akwaka phase 2 Rumudomaya, Port Harcourt River State.

Office Tel: +234(0)84556528 Email: info@muelstech.com Web: www.muelstech.com

#### **Abuja Office**

57b Lobito Crescent, off Ademola Adetokunbo Crescent, Wuse11 Abuja.

Office Tel: +234(0)8028859448 Email: info@muelstech.com Web: www.muelstech.com



