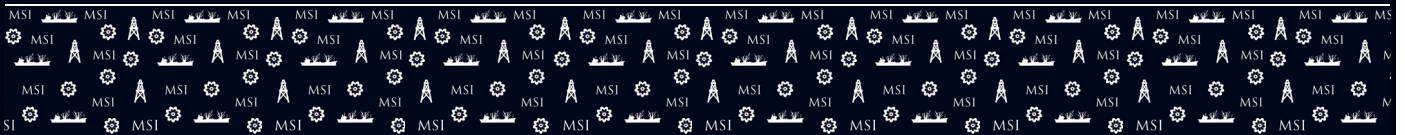




# TURN-KEY OIL & GAS PROJECT CAPABILITIES ONSHORE & OFFSHORE

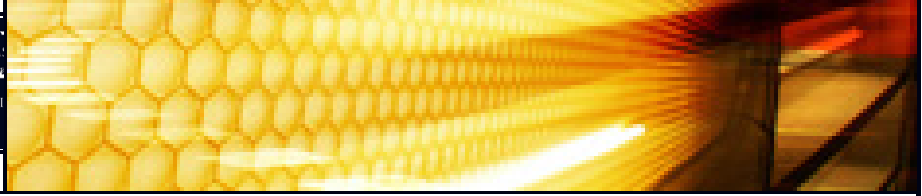
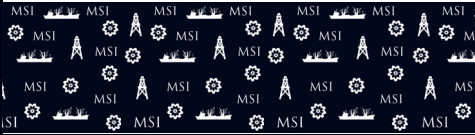


PROJECT ECONOMICS, RISK ASSESSMENT & ASSET ACQUISITION SUPPORT  
PROJECT PLANNING | ENGINEERING | PROCUREMENT | PROJECT MANAGEMENT  
GEOLOGY & GEOPHYSICS | DRILLING OPERATIONS  
PIPELINE & FACILITIES CONSTRUCTION, INSTALLATION & MAINTENANCE  
DREDGING & MARINE SUPPORT  
OPERATIONAL LOGISTICS | PERSONNEL & SUPPORTING SERVICES



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## TURN-KEY RELATED SERVICES

PROJECT ECONOMICS, RISK ASSESSMENT & ASSET ACQUISITION SUPPORT | PROJECT PLANNING | ENGINEERING  
PROCUREMENT | PROJECT MANAGEMENT | GEOLOGY & GEOPHYSICS | DRILLING OPERATIONS  
PIPELINE & FACILITIES CONSTRUCTION, INSTALLATION & MAINTENANCE | DREDGING & MARINE SUPPORT  
OPERATIONAL LOGISTICS | PERSONNEL & SUPPORTING SERVICES

MSI Africa Development Limited (“MSI”) offers a substantial range of capabilities including; project evaluations and acquisition support, planning, engineering, procurement, drilling related services, construction, installation, marine support, and end-to-end project management.

Our comprehensive ‘one stop shop’ places us amongst West Africa’s premier turn-key providers for oil & gas projects. To further distinguish us, we take absolute pride in being THE “no nonsense” Contractor of choice. MSI’s unrivalled in-country experience, backed by available capabilities and equipment, delivers time-proven, practical and cost-effective solutions for best value at every stage of your project.

Our ongoing mission is to continue growing MSI and a business reputation as the project developer of choice in the West African market.

MSI, as a 100% indigenous operator, strives to exceed best-in-class international standards. We seek to bring our expertise in oil & gas field development, and our history of successful project execution in Nigeria, to assist our Clients in achieving their project goals.

## LOCAL CONTENT CONTRACTOR

MSI is one of the few companies who can adhere to local content expectations, as set out in the directives of the federal government. Our emphasis on local content makes MSI’s capabilities all the more attractive to project developers seeking competitive advantage for regional developments. We are capable of assembling the best teams per local content requirements, and our team structures bring significant value to the overall project requirements of our Clients.

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## PROJECT ECONOMICS, RISK ASSESSMENT & ASSET ACQUISITION SUPPORT

MSI is focused on the evaluation of project opportunities within Nigeria. The experience of our personnel in the Nigerian market is a considerable value addition when compiling project economics. There are often unforeseen local complexities that are overlooked as part of cost estimates and general risk assessments, and MSI is capable of identifying both the potential pitfalls and risk mitigation measures in our Client's project planning. In addition, the extensive range of our local contact network allows for measurable time and cost savings during the asset acquisition process. MSI offers a distinct regional advantage to Clients who wish to avoid unforeseen pitfalls to cost and project schedule.

## PROJECT PLANNING & ENGINEERING SERVICES

It is our depth of planning capability & experience, focused and seasoned by our West African experience that enables MSI to confidently tender "turn-key" project packages, or lesser component parts thereof. MSI key staff hold enviable track records in onshore, swamp, coastal and offshore E&P project environments, supported by local experience to guide which technical approach is most likely to succeed in a particular circumstance.

Our project management expertise further enhances our ability to drive project works from start to finish. Whether conceptual field planning, front-end (FEED), detail design, drilling, construction and installation engineering, field service or maintenance engineering; MSI has the people, contacts, equipment, commitment and corporate experience to get the job done.

### ENGINEERING SERVICES

- Feasibility studies
- Engineering services
- Conceptual engineering services
- Detailed design services
- Production Engineering
- Route/site selection

- Material procurement
- Drilling & related services
- Overall project management
- Health, safety & environmental services
- Product export planning

### FIELD SERVICES

- Material receiving and control
- Construction management
- Project Warehousing
- Facilities startup assistance
- Operation of facilities
- Commissioning/startup
- Maintenance Services



## PROCUREMENT SERVICES

An ability to efficiently & effectively source the right combination of materials, services and support facilities is critical to the execution of oil & gas projects. At MSI, we are adept at developing an overall procurement plan that supports and enhances project requirements. From greenfield planning to export, we recognize the importance of planning for contingencies that are inherent to the Nigerian market and are doubly conscious of the essential nature of procurement scheduling that meets engineering and construction milestones.

MSI has the capacity to work in many technical and commercial arenas to overcome a wide range of issues. There is a need to satisfy legislated local content sourcing regulations. MSI is capable of working with government, its parastatals and local non-governmental organizations to ensure all procurement regulations are met. This allows projects to fully qualify for CAPEX recovery approvals; some of which may not be statutory. Our experience, foreknowledge and compliance focus affords significant benefit to our customers.

We have the ability to determine equipment lead times and to source quality materials at the right price and ensure both certified technical data and equipment are available on site to meet with project schedules. MSI personnel's extensive regional experience has led to proven procurement practices, suitable for the West African commercial environment.

Our procurement services include, but are not limited to:

### TECHNICAL SERVICES

- Geology
- Geophysics
- Seismic
- Engineering
- HSE

### EQUIPMENT

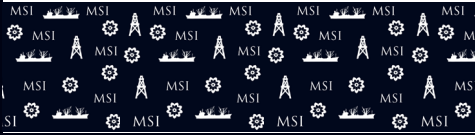
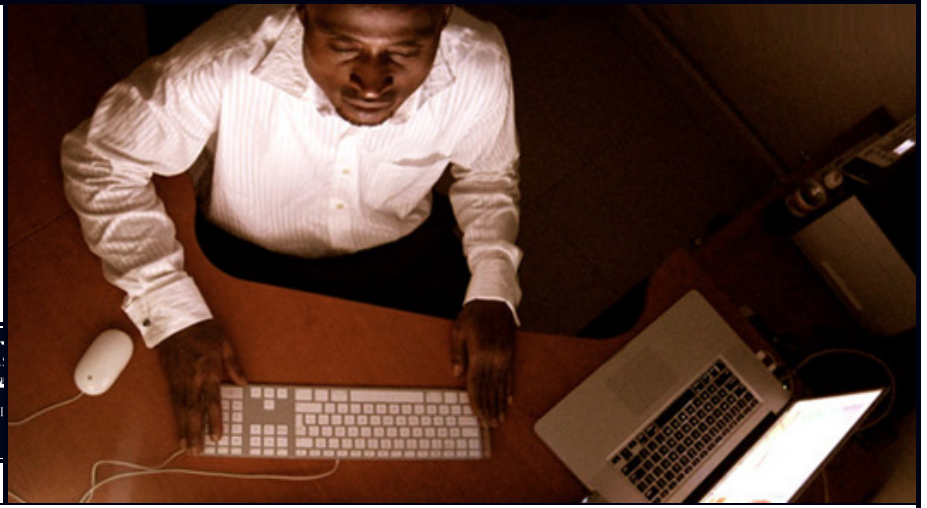
- Compressors
- Pressure Vessels
- Metering Skids
- Facilities
- Wellheads
- Tubulars

### LOGISTICS

- Aviation & Helicopters
- Offshore resupply services & vessels
- Lease and road construction
- Trucking and transport logistics
- Accommodation
- Personnel contracts
- Regulatory
- Ad-hoc and ancillary contracting
- Claims

### DRILLING

- Rigs
- Tubulars
- Drilling Fluids
- Logging
- Testing
- Consumables
- Support services
- Personnel



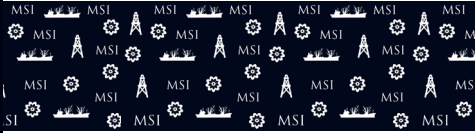
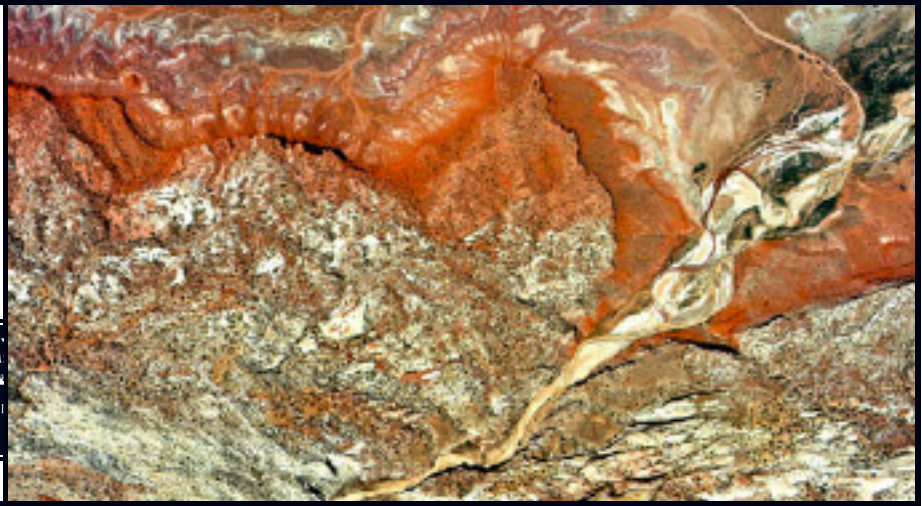
## PROJECT MANAGEMENT

MSI's "end-to-end" capabilities are enhanced by our project management expertise. The regional experience of our project management personnel allows us a complete picture of your project and the ability to recognize potential areas for concern before they happen.

MSI's project management team is responsible for liaising with the client and the client's representatives. The team undertakes pre-planning, scheduling, budgeting, reporting, building community relationships and ensuring that appropriate health, safety and environmental measures and comprehensive QA/QC programs are adhered to. In addition, MSI's local knowledge of the areas we work in allows us to stay abreast of the issues taking place in the community, hire local workers and affords us intimate knowledge of the area and the working conditions.

Our team has an extensive history of project execution in West Africa and are recognized locally as the safest option for completing projects on time and under budget. Undoubtedly there is a distinct learning curve to executing projects in Nigeria and improperly managed projects are quick to suffer the realities of the domestic market. MSI's project management experts keep the Client involved and aware of what is happening on the ground and what awaits ahead.

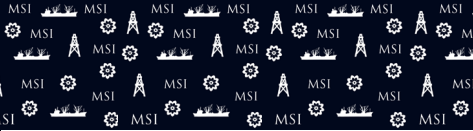




## GEOLOGY & GEOPHYSICS

At MSI, we understand the significant impact G&G work can have on schedules, location selection and the drilling approach required for project execution. We assemble teams of professionals tailored to the project from pre-acquisition through production operations to mitigate these risks. Our G&G services include:

- Exploration Geophysics
- Seismic Acquisition and Survey Design
- Seismic Data Processing
- 1D and 2D Seismic Modelling
- 2D & 3D Seismic Reservoir Analysis
- Seismic Attribute and Image Interpretation
- Seismic Attributes and AVO Analysis
- Seismic Reservoir Characterization
- Seismic Stratigraphy & Attributes
- Reservoir Comparison
- Prospect Appraisal and Petroleum Economics
- Risk Assessment and Management
- Non-Seismic Methods
- Petroleum & Reservoir Geology
- Carbonate Sequence Stratigraphy
- Reservoir Characterization
- 3D Reservoir Modelling
- Borehole Geology: Dip and Image Interpretation
- Evaluation and Management of Fractured Reservoirs
- Geological Assessment of Reservoir Seals and Pay
- Geostatistical Reservoir Modelling:
- Operations and Wellsite Geology
- Cased Hole and Production Log Evaluation
- Wireline Formation Testing



## DRILLING OPERATIONS

MSI has a team of experienced professionals adept at the management of all types of onshore & offshore drilling campaigns. From rig selection & mobilization to shutdown, we have the capacity to supervise rig operations in the heartiest of Nigerian environments. We can provide the spectrum of services to successfully complete drilling activities on time and under budget.

Having long understood the dynamics of a successful drilling campaign over the range of Nigerian drilling environments, we hand pick our team to bring the most adept, functional supervision of rig work to the fore. Working hand in hand with operators to deliver the most project value, the MSI team is well positioned to manage all aspects of E&P drilling worksopes. Our range of professional drilling management services includes organizing, contracting and managing the following:

### DRILLING

- Drilling Operations and Well Control
- Drilling Project Risk Management
- Directional Drilling and Surveying
- Horizontal, Extended Reach and Multilateral Drilling
- Cementing
- Fishing Operations
- Stuck Pipe & Hole Cleaning
- Well Control
- Tubing & Casing
- Drilling Fluids

### COMPLETION AND PRODUCTION OPERATIONS

- Advanced Completions
- Cased-Hole Evaluations
- Coiled Tubing Operations
- Heavy Oil Production Using Steam Injection
- Integrated Production Systems
- Sand Control
- Oilfield Water Management
- Problem Well Analysis
- Production Engineering and Operations
- Well Intervention projects



## PIPELINE & FACILITIES CONSTRUCTION

Construction services include, amongst others, fabrication, assembly, installation, maintenance, and replacement of:

- Cross-country pipelines
- Subsea pipelines, manifolds and facilities
- Offshore jackets, decks and facilities
- Modular processing facilities
- Piers and bridges
- Pump and meter stations
- Gas processing facilities
- Oil and gas production facilities
- Pressure vessels
- Gas compression
- Loading and export facilities

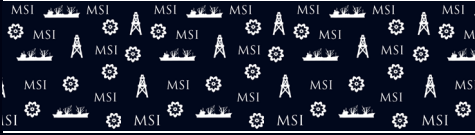
Our team has significant experience in Nigeria and a network of contacts that enable us to succeed at every level.

MSI's business model is to identify and customize the assembly of project personnel, infrastructure, and equipment to suit the project. This allows us to minimize overheads and optimise the selection of facilities and equipment necessary for the project at hand.

MSI provides highly qualified and experienced construction personnel who are hand picked and assembled into the most efficient and effective teams.

We have access to storage, warehousing, fabrication, testing, rigging, transport, and office facilities best suited and required for the construction of offshore and onshore projects.





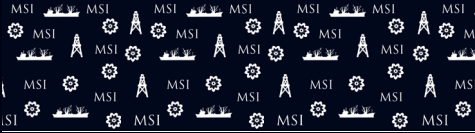
## PIPELINE & FACILITIES INSTALLATION & MAINTENANCE

MSI understands our Customer's expectation for jobs to be delivered within the project schedule and cost envelope.

We assemble the equipment spread and installation personnel teams tailored to your project, including derrick/pipelay barges, work and launch barges, cargo barges tugs and anchor/resupply boats.

Customers expect installation works to smoothly dove-tail into their existing overall field operations. Many interfaces will extend outside of turnkey contract boundaries. This reality demands contingency planning, schedules and exacting installation procedures to be delivered to meet challenges that often arise from opening-up a brownfield workforce or facing sudden and inclement weather or local disturbances. It is in such circumstance that the underlying benefit of choosing MSI comes to the fore. If problems arise, MSI staff, draw upon a wealth of past local experience to swiftly resolves issues.

MSI also adds value for the ongoing maintenance of pipelines & facilities; offering Clients a variety of alternatives to best suit the needs of ongoing operations. MSI can handle extended maintenance requirements both offshore and onshore. Our experience in providing effective ongoing maintenance solutions provides our Clients with recognizable cost and schedule advantages and distances us from our competition.



## DREDGING

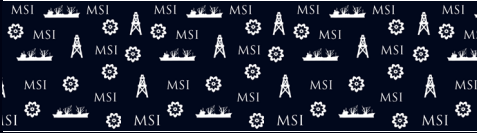
Available under time charter or turn key, MSI can provide an array of dredging vessels to assist in your projects development. MSI offers its clients extensive regional dredging expertise for West African Projects; complemented by best-in-class service and seasoned professional management. MSI seeks to ensure its Clients dredging projects are performed on-time and under budget. Our dredging activities include but are not limited to:

- Dredging and maintenance of access canals.
- Relocation of sand and sediment from municipal waterways, marinas, and canals.
- Dredging and maintenance of slots for oil & gas drilling.
- Sand winning and sandfill of lands.
- Silt, sand, and sediment removal/relocation from inlets, rivers, ponds, lakes, and other inland bodies of water.
- Pumping of sludge to dewatering plants.

## MARINE SUPPORT

MSI can provide marine support equipment to include combination derrick and pipelay barge capability, offshore pile driving, anchor handling tugs and support vessels. As well, MSI can provide specialist support equipment to enable pigging, gauging, flooding and testing of pipelines, welding and NDT plant, tools, lifting and handling aids. MSI constructs and installs fixed drilling and production platforms, mooring facilities, subsea manifolds, pipelines and undertakes repair and modification of in-place subsea facilities.

MSI can offer up to 250 tonnes offshore lift capacity and from 2" - 24" diameter pipelaying. Our marine support optionality is ideally suited to platform and facilities retrofit and maintenance projects, platform survey, dive support and corridor survey projects.



## OPERATIONAL LOGISTICS, PERSONNEL & SUPPORTING SERVICES

MSI can provide a variety of logistics, personnel & support services to West African operations. Such services include:

- Operations engineering and procurement
- Project management
- Manpower Provision
- Corporate planning
- Bid preparation
- Internal auditing
- Human resources
- Information technology and IT support
- Legal services and contract support
- Forecasting and budgeting
- Investor relations
- Risk management
- Logistics management
- Relocation assistance & Visa support
- Field Planning
- Subcontractor Supervision
- Facilities Management
- Regulatory Engagement
- Client Support

## THE MSI ADVANTAGE

MSI seeks to provide the best end-to-end project development value in Nigeria. We offer the most attractive cost and schedule savings, experienced and reliable personnel, and peace of mind to our Clients. Please contact us today and let us show you how MSI can make an important impact to your project goals.

### MANAGEMENT EXPERIENCE

- Established presence in West Africa.
- Unrivalled regional project management resources.
- Straight line accountability and integrity.

### SERVICE AND EQUIPMENT

- End-to-end services with the equipment and seasoned professionals to execute.
- Adaptive solutions to enhance project value and Return On Investment.
- Commitment to 100% Client satisfaction.

### VALUE DRIVEN

- Turn-key solutions that exceed customer expectation.
- Comprehensive project capabilities; proven success.
- Best “all-in” solution for West African projects.

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