

CORPORATE PROFILE

Foremost Indigenous Trenchless Engineering & Construction Company in Nigeria



ENGINEERING | CONSTRUCTION | PIPELINES | HORIZONTAL DIRECTIONAL DRILLING (HDD)
THRUST BORING | PRODUCTION FACILITIES | SECURITY MONITORING | DREDGING | PROCUREMENT

INTRODUCTION AND CORPORATE OVERVIEW

ENIKKOM GROUP is a wholly indigenous company that was incorporated in 1995 to handle special investment portfolio in the different sub-sectors of the economy, like the engineering and construction sector, the dredging and piling sector, the energy and oil & gas sector and the transportation and haulage sectors.

As a result of the growth and expansion of its oil and gas portfolio and in order to synergize the services which we offer, ENIKKOM CONSTRUCTION LIMITED was incorporated on the 23rd day of March 2009 to specifically handle the Pipeline Construction (Land & Swamp, Offshore, Horizontal Directional Drilling-HDD, Horizontal Drilling-Thrust Boring), Steel and Metal Fabrication (Storage Tanks, Process Works), Dredging works, Civil Construction (Piling, Jetty, Bridges), contracts.

ENIKKOM is the leader and pioneer HDD contractor in Nigeria. We have completed record-setting crossings in Nigeria using Horizontal Directional Drilling and hold the record longest crossing of 3.1km in Africa using HDD.

ENIKKOM presently own 9Nos. HDD Rigs and 6Nos. Thrust Boring Machine and 1 No Pipe Pusher. We are the biggest Trenchless Construction Company in Africa.

STRATEGIC ALLIANCES

ENIKKOM has Strategic alliances with the following Companies:-

HDD THAILAND

HDD Thailand who is a major player in the International Trenchless industry. They are one of the foremost Horizontal Directional Drilling Engineers and Contractors in the world. They provide Engineering/Drafting Services, Project Management from Project Definition/Feasibility Studies to Equipment and Materials Procurement/ Installation and commissioning.

ACCOUSTIC-ULTRASONIC Integrity Energy Services Nig Limited;

ACCOUSTIC-ULTRASONIC is a strategic partner of the ENNIKOM GROUP and is the leader in Pipeline Security and Monitoring Systems. They are the Sole Representative for the internationally renowned Pipeline Monitoring system "PipeAngel II". This system allows clients to monitor their pipeline Realtime. It also monitors the integrity of the Pipeline.

Our Vision

To be the most capable and foremost indigenous Engineering Construction Company in Nigeria.

Our Mission

To offer innovative & cost effective solutions, conceptual ideas & design solutions, to our clients on a long term relationship.

Corporate Principle

In responsibility to our shareholders, customers, employees, suppliers and subcontractors, it is our prime objective to ensure economic success on a long-term basis. owing to systematic and continual improvement, we will be able to meet the challenges of the future.

Quality Objective

- To establish a documented Quality system.
- To demonstrate compliance with iso standard 9005.
- To effectively communicate to all employees, the benefits of implementing a quality system
- To comply with ISO standard 9005.

Our Commitment To Safety

Safety is ENIKKOM Number One Priority.

Our equipment fleet is maintained to high standards and codes such as the international safety management (ISM) code and an internationally recognized quality assurance system.

ENIKKOM equipment undergoes a continuous preventative maintenance program. **ENIKKOM** is committed to reinforcing a 'safety comes first' culture with its employees. Everyday activities are performed using certified equipment and procedures. **ENIKKOM** implemented a new occupational safety and health program (OSH). Two elements of this program are the Personal Protective Equipment and Job Hazard Analysis.

TECHNICAL CAPABILITIES – EQUIPMENTS

Thrust Boring

THRUST BORING MACHINE 1
24 - 100 HORIZONTAL EARTH
BORING MACHINE
YEAR OF PURCHASE: 2000



THRUST BORING MACHINE 2
36 – 340 HORIZONTAL EARTH
BORING MACHINE
YEAR OF PURCHASE: 2010



THRUST BORING MACHINE 3
36/42-600E HORIZONTAL EARTH
BORING MACHINE
YEAR OF PURCHASE: 2010



THRUST BORING MACHINE 4
42/48-600 HORIZONTAL EARTH
BORING MACHINE
YEAR OF PURCHASE: 2010



THRUST BORING MACHINE 5
48/54-G900 HORIZONTAL EARTH
BORING MACHINE
YEAR OF PURCHASE: 2010



THRUST BORING MACHINE 6
72-1200NG HORIZONTAL EARTH
BORING MACHINE
YEAR OF PURCHASE: 2013



TECHNICAL CAPABILITIES – EQUIPMENTS

Pipe Pusher / Direct Pipe



Extra-Power for Pipe Pullback

The Prime Pipe Pusher mainly serves for additional push or pull force with pipe pullback, but also offers the perfect solution for application combined with tunnel boring machines.

On customer's request the Prime Pipe Pusher is also available with Rack & Pinion (R&P) system or cylinder drive. Depending on customer's requirements and job-site conditions the Prime Pipe Pusher can be mounted alternatively on the drill mast of a drilling rig or on steel frame. In combination with the optional drive systems this product offers the perfect solution for demanding job-sites working with pipeline diameters of 20" to 60".

Push force is transferred via a number of tensioning chains, which are installed into a chain housing, onto the pipe to be pulled in. The geometrical shape of the tensioning chain guarantees an even surface pressure at the entire circumference of the pipe and thus enables transfer of a push force of up to 100 to per chain. The casing is directly linked to the feeding system (cylinder, R&P) and has a capacity of four to ten tensioning chains, thus allowing for a maximum push force of 400 ton to 1,000 ton.

This system enables a unique light weight construction with utmost stability.

Advantages:

- Operating in both directions
- Variable length of 6 m up to 24 m
- Suitable for any diameter ranging from 20" to 60"
- Tensioning chains can be upgraded
- Hydraulic carriage motors can be upgraded
- Low weight
- Only minimum foundation work required

Technical data:

- Push / Pull Force 400 t – 1,000t
- Diameter Range: 20" – 60:
- Torque: 90 – 120 kNM
- Weight: 50 t

TECHNICAL CAPABILITIES – EQUIPMENTS

Dredgers / Vessels

DREDGER NO. 1

**Enikkom Ellicott Dragon Dredger, Series 1170-50
(Cutter Suction) 16"/16" – MV KENENNA
YEAR OF PURCHASE: 2008**



DREDGER NO. 2

**Enikkom Ellicott Dredger, Series 670-42
(Cutter Suction) 14"/14" – MV KECHIKEMDI
YEAR OF PURCHASE: 2010**



Enikkom Construction Limited MV DONAUX Offshore Work Barge



Principal Characteristics	LOA	61m	Deck Equipment	AMCON 1500 Double Drum Winch	2
	Beam	25m		Max Pull: 670 kN (still) 36mm cable	
	Depth	4.9m		AMCON 270 Double Drum Winch	2
	Draft (max)	3.0m		Max Pull: 228 kN (still) 32mm cable	
	Work Deck Area	400m ²		Delta Flipper 51 Anchors	8
	Below Deck Storage Holds	3		Fairleads	8
	Lloyds Register Class	+100 AI		Smit Towing Brackets	2
	Flag	Panama		31 Hydraulic Capstans	4
	Last Major Upgrade	2009		Zodiac Boat with Outboard Engine	1
Diesel Generators	1,000 kVA (Caterpillar)		Crane Particulars	Crane type	DEMAG CC-2000
	175 kVA (GM)			Boom Length	24m to 72m at 12m
	250 kVA (Caterpillar)			Maximum Length	250 T
	35 kVA (Emergency)			LINKBELT Crawler Crane (Opt)	Maximum lift: 80t

TECHNICAL CAPABILITIES-EQUIPMENT

Horizontal Directional Drilling (HDD)

HDD RIG NO. 1
AMERICAN AUGERS DD 580 & MUD CLEANING SYSTEM
300 TON PULL BACK CAPACITY HDD RIG
YEAR OF PURCHASE: 2003



HDD RIG NO. 2
ASTEC 3292 HDD RIG & MUD CLEANING SYSTEM
15 TON PULL BACK CAPACITY
YEAR OF PURCHASE: 2008



HDD RIG NO. 4
AMERICAN AUGERS DD 1100 HDD RIG WITH MCR-10000 DRILLING
FLUID CLEANING SYSTEMS
500 TON PULL BACK CAPACITY
YEAR OF PURCHASE: 2012



HDD RIG NO. 5
AMERICAN AUGERS DD 1100 HDD RIG WITH MCR-10000 DRILLING
FLUID CLEANING SYSTEMS
500 TON PULL BACK CAPACITY
YEAR OF PURCHASE: 2012



HDD RIG NO. 7
AMERICAN AUGERS DD 220 HDD RIG & MUD CLEANING SYSTEM
100 TON PULL BACK CAPACITY HDD RIG
YEAR OF PURCHASE: 2012



HDD RIG NO. 8
AMERICAN AUGERS DD 1100 HDD RIG WITH MCR-10000 DRILLING
FLUID CLEANING SYSTEMS
500 TON PULL BACK CAPACITY
YEAR OF PURCHASE: 2013



TECHNICAL CAPABILITIES-EQUIPMENT

Horizontal Directional Drilling (HDD)

HDD RIG NO. 3

AMERICAN AUGERS DD 440T HDD RIG & MPR-6000 DRILLING FLUID MIXING, PUMPING & RECYCLING SYSTEMS
MUD CLEANING SYSTEM
200 TON PULL BACK CAPACITY HDD RIG WITH
YEAR OF PURCHASE: MAY, 2008



HDD RIG NO. 6

AMERICAN AUGERS DD 625 HDD RIG & MUD CLEANING SYSTEM
300 TON PULL BACK CAPACITY HDD RIG
YEAR OF PURCHASE: 2012



HDD RIG NO. 9

AMERICAN AUGERS DD 155 HDD RIG & MUD CLEANING SYSTEM
70 TON PULL BACK CAPACITY HDD RIG
YEAR OF PURCHASE: MAY, 2017



TECHNICAL CAPABILITIES – EXPERIENCE

Some Key Projects Experience (Summary)

1. ANGO TO AUNTIE JULIE PIPELINE WORKS

PROJECT NAME: ANGO TO AUNTIE JULIE PIPELINE WORKS FOR THE PROVISION OF HYDROCARBON EVACUATION PIPELINE FROM THE ANGO RESERVOIR IN OML-59 TO AUNTIE JULIE PRODUCTION FACILITY

CLIENT NAME: BELBOP NIGERIA LIMITED / MSI AFRICA DEVELOPMENT LIMITED

PROJECT SCOPE: Dredging of creeks, canals and access channels to provide access for Drilling Rigs and associated marine equipment. Dredging of well slots in accordance with the Field Development Program. Engineering and procurement of all wellhead platforms, wellhead piping, gathering equipment/systems, flowlines and gathering manifolds including associated wellhead controls, ESD systems, electrical and instrumentation systems and multi-phase metering system. Fabrication of wellhead platforms and wellhead piping. Fabrication of 12 ligament inlet manifold. Fabrication of 12" " diameter pipeline launcher skid. Fabrication of 12" diameter pipeline receiver skid. Installation of wellhead platforms. Installation of wellhead piping, control systems and ESD system. Installation of entire gathering system comprising twelve (12) flowlines traversing wellhead slots, rivers, creeks (major & minor) and swamp terrain. Pre-commissioning and Commissioning of gathering systems. Installation of 12" bulk pipeline system 4 km through swamp terrain via HDD installation. Installation of 12" bulk pipeline shore approach – 2.5 Km in length. Pre-commissioning and commissioning of 12" pipeline system 35 Km in length.

PROJECT STATUS: Completed – November 2016.

2. EXPANSION OF ESCRAVOS-LAGOS GAS PIPELINE PROJECT – PHASE II; INSTALLATION OF 36INCH X 10KM PIPELINE SECTIONS BY HORIZONTAL DIRECTIONAL DRILLING (HDD)

PROJECT NAME: EXPANSION OF ESCRAVOS-LAGOS GAS PIPELINE PROJECT – PHASE II

CLIENT NAME: NNPC / ZAKHEM CONSTRUCTION NIGERIA LIMITED

PROJECT SCOPE: Installation of 36inch X 2km Pipeline By Horizontal Directional Drilling (HDD). Across Swamp and Built Up/Encroachment Areas (KP 317+445 TO KP 319+880). Installation of 36inch X 600m Pipeline By Horizontal Directional Drilling (HDD), Across Lagos /Ibadon Express Road (KP 317 + 00 to KP 317 + 500). Installation of 36inch X 2.8km Pipeline By Horizontal Directional Drilling (HDD), Ogun River and Adjoining Swamp (KP 322+604 TO KP 325+247). Installation of 36inch X 1.9km Pipeline By Horizontal Directional Drilling (HDD), Across Built Up/Encroachment Areas (KP 325+700 TO KP 327+600). 7.2km Phase 1 of HDD Works Completed

PROJECT STATUS: Phase 1 Completed

3. ONSHORE PIPELINE FOR GAS TRANSMISSION ON THE LOT 3 NIPP CONTRACT AT CALABAR CROSS RIVER STATE

PROJECT NAME: CONSTRUCTION, LAYING AND COMMISSIONING OF 24INCH X 21.5KM GAS TRANSMISSION PIPELINE AT ADANGA TO CALABAR

CLIENT NAME: COMPACT MANIFOLD AND ENERGY SERVICES LIMITED

PROJECT SCOPE: Construction, Laying and Commissioning of 24" x 21.5km Gas Transmission Pipeline including welding works on the Onshore part of the Lot 3 NIPP project.

PROJECT STATUS: Completed July, 2015.

TECHNICAL CAPABILITIES – EXPERIENCE

Some Key Projects Experience (Summary)

4. PIPELINE CONSTR. OF SEVEN (7) NOS. RIVER CROSSING BY HORIZONTAL DIRECTIONAL DRILLING (HDD)

PROJECT NAME: Pipe Lay and Weld for the Construction of Transmission Pipeline from Ukanafun in Akwa Ibom State to Mfamosing in Cross River State.

CLIENT NAME: OILSERV LIMITED

PROJECT SCOPE: 35KM of 18" land pipeline. Including 7 (nos) River Crossings installed using Horizontal Directional Drilling (HDD) viz:

· Calabar River	-	704m
· Itu River	-	614m
· Esu River	-	523m
· Uruan River	-	1300m
· Abak River	-	363m
· Aka Ibonda River	-	900m
· Esukudoh River	-	561m

PROJECT STATUS: Completed – March 2011

5. YENOGA 40" DIA ROAD/RIVER/POND CROSSINGS BY HDD

PROJECT NAME: CONSTRUCTION AND INSTALLATION OF 40" X 760M GAS PIPELINE BY HORIZONTAL DIRECTIONAL DRILLING UNDER THE MBIAMA TO YENOGA DUAL CARRIAGEWAY IN YENOGA FOR THE EASTERN GAS GATHERING SYSTEM PHASE II PIPELINES (EGGS-2).

CLIENT NAME: DAEWOO NIGERIA LIMITED / SPDC

PROJECT SCOPE: Install 40" x 760m pipeline at a depth of 100 feet using HDD

PROJECT STATUS: Completed – February, 2010.

6. PIPELINE CONSTRUCTION OF 50KM GAS DISTRIBUTION LINE

PROJECT NAME: 36" X 196KM GEREGU GAS SUPPLY PIPELINE PROJECT, SUBCONTRACT FOR THE INSTALLATION OF 50KM SECTION FROM GEREGU GAS PLANT TOWARDS AJAOKUTA.

CLIENT NAME: ZAKHEM CONSTRUCTION NIGERIA LIMITED

PROJECT SCOPE: Collection of Line Pipes. Row clearing. Stringing. Welding. Doping. 1 No River Crossing by open Cut Length 350m (Excavation, lowering and backfilling were Client Responsibility)

PROJECT STATUS: Completed – December 2007

7. PIPELINE CONSTRUCTION OF 50KM OF GAS DISTRIBUTION LINE

PROJECT NAME: CONSTRUCTION / LAYING AND COMMISSIONING OF 50KM BY 4", 8" & 12" GAS DISTRIBUTION PIPELINE IN BENIN CITY AND 3 NO CNG FILLING STATIONS – EDO STATE

CLIENT NAME: NIPCO PLC

PROJECT SCOPE: 15km of 12" Distribution Line. 25Km of 8" Distribution Line. 10 km of 4" Distribution Line. 1.5 km of the various sizes of Pipeline were installed by Horizontal Directional Drilling across roads, built up areas etc;

PROJECT STATUS: Completed – August 2009.

TECHNICAL CAPABILITIES – EXPERIENCE

Some Key Projects Experience (Summary)

8. PIPELINE CONSTRUCTION OF 15KM OF GAS DISTRIBUTION LINE – PHASE 1

PROJECT NAME: CONSTRUCTION / LAYING AND COMMISSIONING OF 15KM of 12", 8" & 4" UNDERGROUND STEEL PIPELINE LAYING WORK & ABOVE GROUND PIPING WORK AT IBAFO AREA (LAGOS – IBADAN EXPRESSWAY), OGUN STATE. (PHASE 1).

CLIENT NAME: NIPCO PLC

PROJECT SCOPE: 15km of (12" Gas Distribution Pipelines, 8" Gas Distribution Pipelines and 4" Gas Distribution Pipelines) 3km of the various sizes of Pipeline were installed by Horizontal Directional Drilling (HDD) across built up areas and a creek.

PROJECT STATUS: Completed – Feb 2015 (Phase 1)

9. PIPELINE CONSTRUCTION OF 15KM OF GAS DISTRIBUTION LINE – PHASE 2

PROJECT NAME: CONSTRUCTION / LAYING AND COMMISSIONING OF 10KM of 12", 8" & 4" UNDERGROUND STEEL PIPELINE LAYING WORK & ABOVE GROUND PIPING WORK AT IBAFO AREA (LAGOS – IBADAN EXPRESSWAY), OGUN STATE. (PHASE 2).

CLIENT NAME: NIPCO PLC

PROJECT SCOPE: 10km of (12" Gas Distribution Pipelines, 8" Gas Distribution Pipelines and 4" Gas Distribution Pipelines) 5km of the various sizes of Pipeline were installed by Horizontal Directional Drilling (HDD) across built up areas and a creek.

PROJECT STATUS: Completed – Aug 2016 (Phase 2)

10. SPDC OTUMARA-ESCRAVOS PIPELINE PROJECT –

INSTALLATION OF (12" + 3") X 2.78KM BUNDLED CROSSING

PROJECT NAME: SPDC OTUMARA-ESCRAVOS PIPELINE PROJECT

CONTRACT NAME: HDD FOR ESCRAVOS RIVER CROSSING

CLIENT NAME: SAIPEM CONTRACTING NIGERIA LIMITED

PROJECT SCOPE: Mobilizing of 2nos. HDD Rigs (300Tons) Plus (500Tons) to Site. Site Set Up. Installation of 12" + 3" x 2.78km Long Bundled Crossing Using the Intersect Method whereby the Crossing was Drilled from Both Ends Using Two (2) Rigs and Intersecting at the Middle for the Pilot Hole.

PROJECT STATUS: Completed, April 2016.

*****NOTE*** THIS IS THE LONGEST BUNDLED CROSSING IN AFRICA AT THE TIME OF COMPLETION**

11. REPLACEMENT OF THE VANDALISED SECTION OF THE MOSIMI TO ATLAS COVE (AREPO TO IMAGBON) 3KM PIPELINE USING HORIZONTAL DIRECTIONAL DRILLING (HDD)

PROJECT NAME: EMERGENCY RECONSTRUCTION OF ATLAS COVE – MOSIMI 16" X 3000M PIPELINE SECTION AT AREPO SWAMP USING HORIZONTAL DIRECTIONAL DRILLING (HDD) AS A SECURITY SOLUTION.

CLIENT NAME: NNPC / PPMC

PROJECT SCOPE: Procurement, Feasibility Study, Design, Welding / Pre-Testing, Drilling of the 3km Long x 16" Crossing Using 2 nos. Maxi rigs (300Tons and 500Tons). HDD Intersect Method was also used here whereby the 2 Rigs Drilled from Both Ends, Intersecting at the Middle for the Pilot Hole. Tie-In / Commissioning. Cathodic Protection (CP) Installation.

PROJECT STATUS: Completed, April 2017.

ENIKKOM OFFICE FACILITY, ABUJA

ENIKKOM CONSTRUCTION LIMITED has her corporate headquarters located in Gwarrimpa, Abuja, Nigeria.

HEADQUARTERS:

ENIKKOM's Corporate Headquarters, F.C.T., Abuja.

House 11, 65 Road, Abuja Model City, Gwarimpa, FCT, Nigeria.

Tel/Fax: +234 (0)80-35082614, +234 (0)703-5557575

E-mail: info@enikkom.com • Website: www.enikkom.com

PROXIMITY TO CITY (ABUJA) CENTRE: 50 mins.

ENIKKOM OFFICE AND EQUIPMENT FACILITY, AREPO

ENIKKOM CONSTRUCTION LIMITED has her Operations base located at her industrial complex facility in Arepo, Ogun State, Nigeria, with various areas for Office and Equipment Facility as follows:

OPERATIONS BASE:

ENIKKOM's Operation's Base, Arepo, Ogun State.

No 7 Joseph Ogunjobi Street, Praise Hill Estate, Arepo, Ogun State. Nigeria.

ENIKKOM OFFICE, FABRICATION AND EQUIPMENT FACILITY, PORT HARCOURT

ENIKKOM CONSTRUCTION LIMITED has a Facility on East-West Road for Construction and Fabrication works for various projects.

SITE: OBASI BROTHERS INDUSTRIAL PARK, 'AREA C', EAST/WEST ROAD, ELEME, PORT HARCOURT, RIVERS STATE, NIGERIA.

PROXIMITY TO ONNE SEAPORT: 5 mins.





ACousto-ULTRasonic
INTEGRITY ENERGY SERVICES LTD



PIPELINE SECURITY MONITORING SYSTEM Pipeline Monitoring System "PipeAngel II"

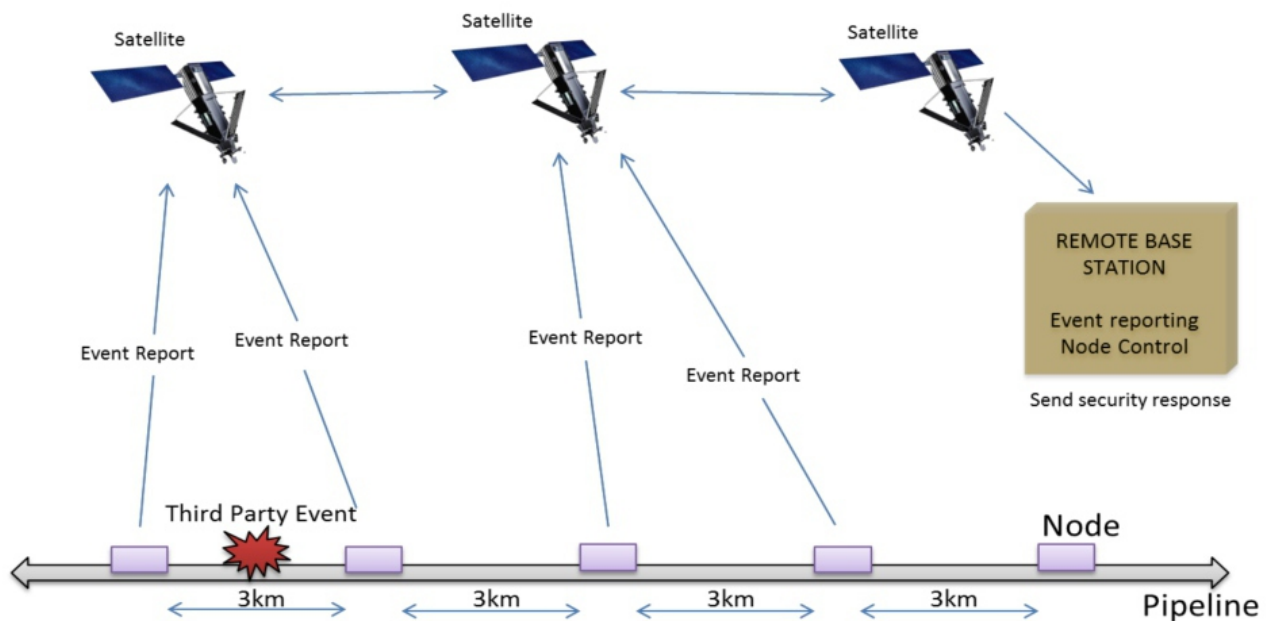
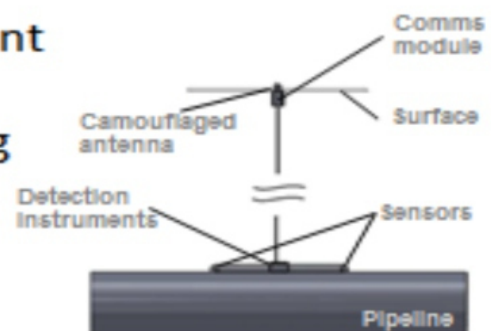


Figure 1 overview sketch of system. Nodes distributed at 3km intervals along a pipeline monitoring for vibrations from a "third-party event" and report the event back to a central base station that can be remote from the pipeline.

Automatic Detection of Pipeline Vandalism and Theft

- Covert system for detecting events on pipelines
- Provides instant warning of an event
- Locates event to within 500 m
- Wireless nodes are deployed along the pipeline
- Cover many kilometres
- Battery life > 5 years
- Sends alerts via Iridium global satellite network
- Monitor centre monitors alerts from nodes and reports events



PROJECT PICTURES





Foremost Indigenous Trenchless Engineering and Construction Company in Nigeria

- ★ *Trenchless Installation (9 Nos. HDD Rigs, 6 Nos. Thrust Boring Equipment, 1 No. Pipe Pusher and Counting)*
 - Horizontal Directional Drilling (HDD & CHDD)
 - Thrust Boring
 - Direct Pipe
- ★ *Flowlines and Pipeline Construction*
- ★ *Flowlines / Pipeline Maintenance*
- ★ *Production Facilities Construction and Operations*
- ★ *Dredging and Piling Works*
- ★ *Pipeline Security and Monitoring*



CORPORATE HEADQUARTERS: House 11, 65 Road, Abuja Model City, Gwarimpa, FCT, Nigeria.
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E-mail: info@enikkom.com | **Website:** www.enikkom.com