



Fiber Optics Profile

Your Trusted Solutions Provider



Who we are

Vision

To be the leading Pan African Technology Group in Africa.

Mission

To develop technology that mirrors our client's requirements and enhances their real world business processes.

Strategic Objective

By the year 2022 ATX will be a leading Pan African Technology group with more than 40 companies throughout Africa



Background

ATX Technology was founded in the year 2005 and is a company incorporated in Rwanda with Head office located in Kimironko in Gasabo District of Rwanda

Products and Services

Power:

Street Lighting (Solar and Grid Power), Enterprise Power, Rural Electrification including Distribution of High Medium and Low Voltage Power.

Telecom Infrastructure:

GSM/CDMA site Planning and Acquisition, Site Build, BTS/Microwave & other Transmission Equipment Installation, Optimization, Fiber Optic Installation- Long Haul up to FTTx Technology

Construction works

Civil Engineering works:

Route Survey and Planning, Manholes, Re-instatement, Roads, Route Markers, Tar works, Sign Posts, Retaining walls, Concrete envelopes, Site Entries/Access

Real Estate:

Apartment / House Construction, Leasing/Rent, Sales, Property Management.



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Key success Factors

Project organization and Planning

Finance

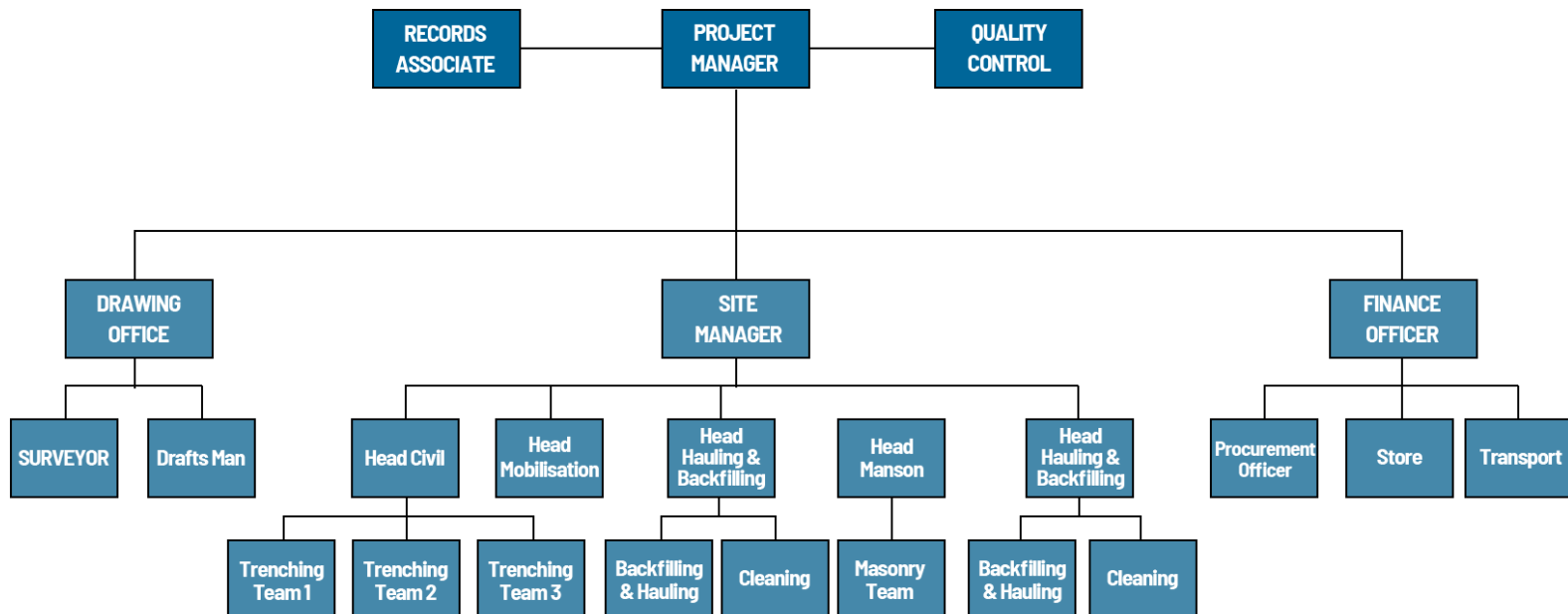
Skilled Man Power

Knowledge of Environment

Cooperation with Client



Project Organization



Key success factors – the Planning Phase

- Scope-Clearly defined
- Time – Specific Time (Start and End)
- Finance
- Quality
- Human Resources (Skills)
- Communications
- Risk Mitigation and Management
- Procurement

Our Implementation Cycle

Generally our cycle of FOC project

Survey and design

Our experienced field team captures the relevant information and parameters regarding the civil work to be performed. This information is presented in graphical AUTOCAD, GIS, and MS Visio formats.

We capture all the information relevant for the Project Manager to generate BOQs and subsequently do costing.

Right of Way

Our right of way team visits and presents letters to the administration of the areas under implementation and other stake holders

Mobilization

The casuals to do the job are mobilized, registered and camping for them organized including food. Preference is given to casuals living in the area.



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We have field supervisors able to handle over 3000 casual workers.

We have a well-equipped warehouse with all tools ranging from picks, spades, wheel barrows, mixers, compressor, measuring tools, cutting tools, and others.

We use both manual and mechanized means

Marking and trenching

White chalk marking, width 45mm



Manual laying of HDPE pipes



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Laying the conduits is deployed according to the trenching types and the formation preferred by the client. Formations include 1-way, 2-way, 4-way, 6-way, 9-way, 12-way duct and 24-way duct systems.

Backfilling is done using good soil material. Only in rock and gravel places do we import backfilling material to meet the standard installation requirements.

Compaction is done layer by layer using rammers

Thrust Boring

Increasing regulation by in many countries has made cutting roads very expensive. ATX Technology uses trenchless technologies to install pipes across roads.



Manhole construction

Manhole shuttering



Casted manhole, based on customer specification 1200 x 900 x 800 mm



Route Markers

We fabricate cable route markers intended to identify the route of the Fiber Cable. Route markers are deployed along the cable route.

The typical dimensions of the Route marker is 0.15 x 0.15 x 0.70 m (Width, Length, and Depth)

Fiber Installation

Cable handling can be the difference in registering minimal losses on the installed link. ATX Technology's team offers expertise and efficient fiber installation methods both manual and mechanical.



Air compressor for fiber blowing



Fiber blowing process

Fiber termination

We do fiber splicing in joint closure for manhole installation as well as terminations in ODFs and patch panels. Our specialist teams provide pre and post installation test reports as generated by the OTDR in any format required. Details of splice losses and overall attenuation along the length of the cable can be readily availed.

We provide post installation support to maintain the quality of the fiber.

Fiber testing, splicing and termination

Pre and Post fiber tests



Fusion splicer



On site fiber testing



OTDR unit



Joint preparation

As-built documentation

We provide our customers with as-built technical data detailing technical documents and specifications of project materials and equipment (optical cable, splicing closure, ducts, etc.)

We supply as-built drawings which contain the following:

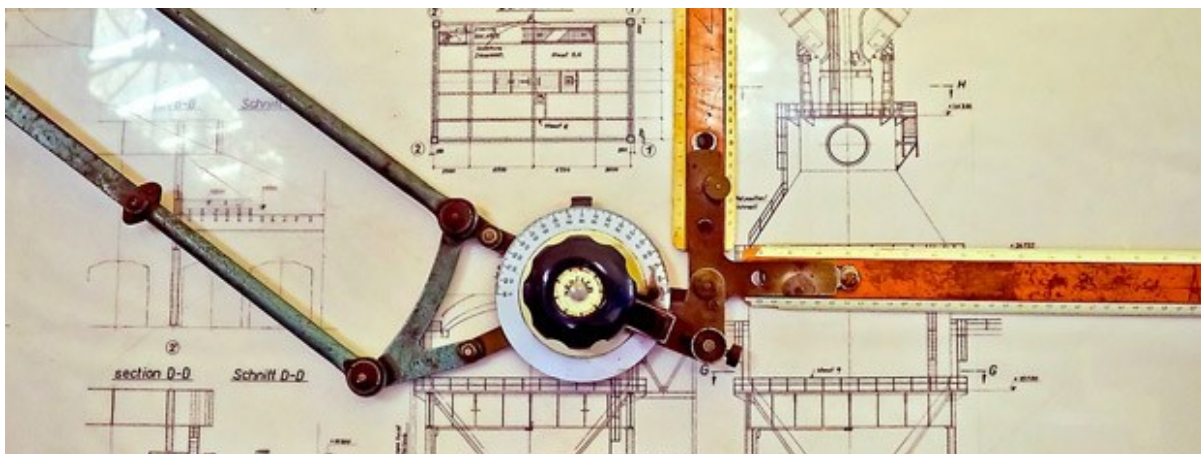
Detailed technical drawings in AUTOCAD for the entire route

OFC route map including splicing points, manholes, with detailed location information

Detailed duct space drawings

GPS coordinates for all underground joints, manholes and road crossings

Detailed BOQs as-built



Fiber to the building

ATX Technology possesses experience in connecting operators to end users. The range of services we cover here includes;

PONs

GPON

Safety

We have standard road side safety tools that ensure that all our workers are kept safe while working on the road.



Over 300 cones for safe guarding the sites



Over 300 high visibility bomber jackets



Helmets for head protection



On site first aid box



Men-at-work signs and other hands traffic control signs



Gloves for protection of hazardous actions and objects

Finance

ATX Technology has financial capacity to complete the entire project

ATX Technology relationship with the banks is excellent. The banks can support ATX to run huge projects

The Client (KT) need also to support ATX by paying promptly and providing good contract terms as this project is finance intensive

Skilled Man Power

ATX has a pool of skilled manpower comprising of:

6 project Managers

12 Site managers

Electrical Engineers, Civil Engineers, masons, 6 surveyors

24 Headmen

80 Supervisors

16 Machine Operators

Store keepers and logistics Officers

Communications

A closed-User-Group is to be used. All supervisors will be able to call each other with this facility.

Daily reports will be sent by the ATX PM to KT PM.

Progress meetings will be conducted as and when KT wishes preferably weekly

Internal meeting will be conducted on a daily basis.

Risk Mitigation and Management

Project risks will be anticipated by conducting intuitive assessment and survey

Insurance to laborers, machines and implementation area

Good cooperation with stake holders

Reporting on time

Procurement and Logistics

The warehouse and Camp for supervisors shall be located strategically in a town mid-way between two furthest points.

All casual laborers shall be housed in movable tents or rented buildings.

Objectives

- To save on fuel costs of driving supervisors to site and back.
- Shorten the time supervisors take to reach site.
- It is the best alternative given that there are no houses big enough to house all the workers.

Tools and preparations

Casual workers

- We are going to mobilize 2400 casual workers on three sections

Tools

- Each casual worker will be facilitated with a pick and axe.

Machinery

- We will have 3 compressors, two thrust boring machines, a blowing machine, 8 compactors, 1 road cutter and a complete set of fiber termination tools, 6 GPS, 3 Generators, Power meters, 4 Jack Hammers.

Vehicles

- We have a number of vehicles for this project including;
2 Isuzus, 2 Fusos including a crane car, 4 pick-ups and PM car.

Telecom References

National Government Backbone under Only Infortel	Did over 500km Fiber Blowing and thrust Boring (768m)	Completed
MTN Fiber Optics Project	Optical Fiber Project (~250Km)	Completed
MTN GPON	102 Sites Indoor Works, 1Sites Civil works-Outdoor	Completed
Rwandatel Network	108 BTS Sites 28 UMTS Sites 38 Microwave 04/02/2016OSN	Completed Customized ICT Solutions
Rwandatel	Rwandatel Call Center 16 Site MSAN	Completed
MTN	09-OLT OSN-25 SRS Project Offshore	Completed
Rwandatel	165 sites - Site Audit,Verification,Drive Test, Tuning and Optimisation	Completed
ORN	Connected over 100 LTE sites and government Institutions	Completed



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