

SMARTER TODAY **GREENER** TOMORROW



# Exploits of Fibre Networks in Africa

Presented by Colin Brown



# Introduction

Infrastructure Services Group Limited (ISG) is a Fibre Sensing and Specialist Telecommunications Infrastructure Company, located in Teesside, UK.



**As part of the Group we also have InfraSENSE Ltd and Ocean Fibre Ltd.**

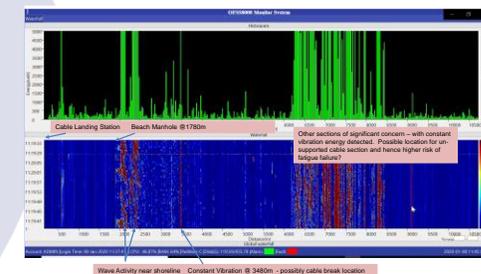


ISG combines a wealth of knowledge and experience with an innovative approach and an understanding of our clients' challenges regarding infrastructure monitoring utilising Distributed Fibre Optic Sensing technologies. (DFOS)

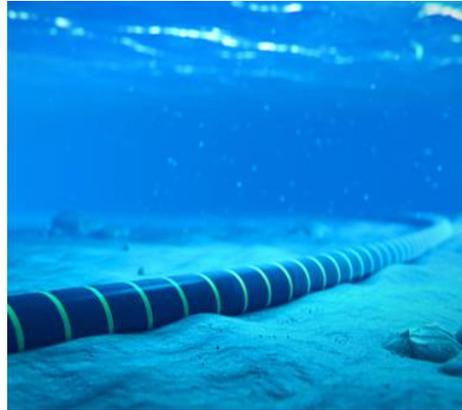
# Introduction

ISG has consistently challenged the technologies limitations, by stretching the boundaries of what is possible, which has identified new and exciting fibre sensing and monitoring applications.

In the area of asset and infrastructure monitoring and protection, the ISG team have been successful in the design, installation and integration of asset monitoring solutions for many years, with key individual staff members having over 30+ years background in this field.



# Industry sectors



## Submarine Cable Protection

- Integrity monitoring
- Natural & Geo-hazards
- External threats
- Pro-active maintenance



## Smart Infrastructure

- Traffic flow control
- Environmental management

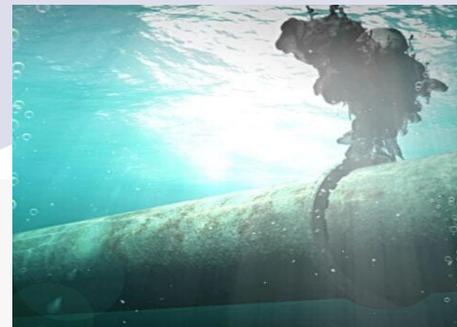
## Smart buildings

- Safety & Security
- Energy



## Critical Infrastructure

- Perimeter security
- Road & Rail networks
- Pipelines
- Tunnel control
- Fire detection



## Oil & Gas

- Leak detection
- Third party interference
- Flow assurance
- Geo-hazards

# Industry sectors



## Network Engineering

- Design & Installation
- Network remediation
- Commissioning
- Maintenance
- Troubleshooting



## Power Industry

- Overhead line monitoring
- GIS Monitoring
- Fibre remediation
- Switchgear integrity
- SF6 leakage detection
- Asset protection



## Process Facilities & Safety

- Vessel/pipe leakage
- Process control
- Fire detection
- Perimeter security
- Access control

# Sustainable Real-Time Infrastructure Monitoring

Our outsourced 24x7 infrastructure monitoring service will help ensure that our clients DAS/DTS systems remain highly available. We will be alerted to all alarm events that the system detects and any potential performance issues and will be able to proactively make or suggest changes that will positively impact the performance of the monitoring systems, manage system health and condition 24/7/365.

The monitoring service is an added layer of security and resilience to any operator of critical infrastructure.



*Launching  
in the UK, late  
2022/23*

# Africa -

## The Continent at a Glance

- Population 1.4 bn people
- 54 recognised countries
- 41% of population is <25 years of age



# How Big is Africa?



United States (contiguous)



Europe



India



Japan



China