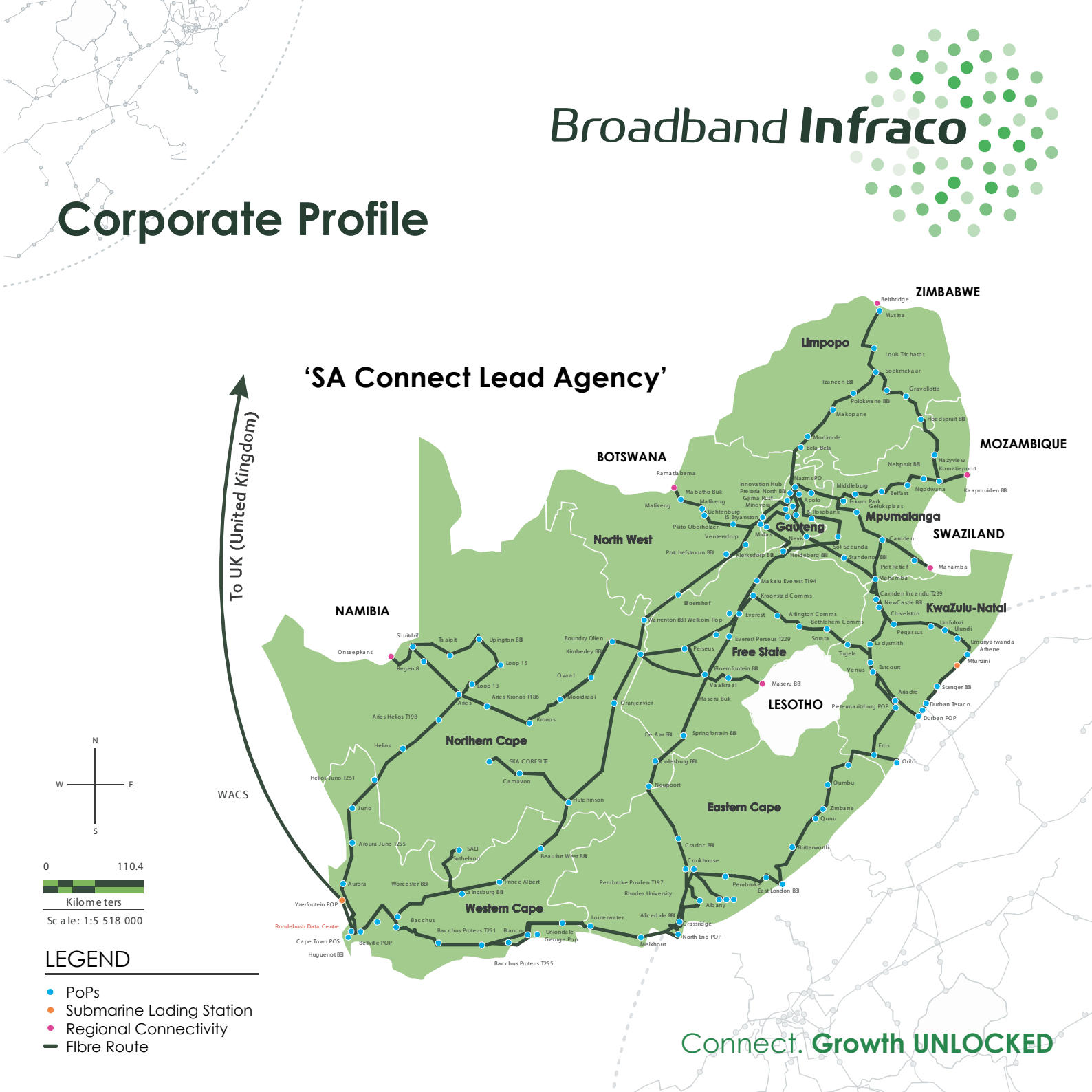




Corporate I





**Economic
growth unlocked**
through backhaul
connectivity

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Business Overview

Broadband Infraco provides terrestrial and undersea wholesale broadband connectivity products and related value added services to public and private licensed or license-exempt entities across all industries in South Africa. We also support projects of national importance and extend our collaborative and commercial engagements to African and international markets.

Our network covers all nine provinces, major cities and towns of South Africa and also extends to the borders of our neighbouring countries of Botswana, Lesotho, Mozambique, Namibia, Swaziland and Zimbabwe to provide required interconnectivity. We are also a Tier 1 Investor in the West Africa Cable System (WACS), which connects South Africa to the United Kingdom, with landing stations in Namibia, Angola, Congo, DRC, Ghana, Cameroon, Nigeria, Togo, Ivory Coast, Cape Verde, Canary Islands and Portugal.



1

National Connectivity:

- Fibre optic network currently comprises approximately 15 000km of fibre and 156 Points of Presence (PoPs).
- Utilizes Dense Wavelength Division Multiplexing (DWDM) equipment, providing a number of 10 Gigabits/s, 40 Gigabits/s and 100 Gigabits/s lambdas along the majority of fibre routes.
- Provides IP connectivity on demand.



2

Regional Connectivity:

- Delivering extended connectivity to the neighbouring countries: Botswana, Lesotho, Mozambique, Namibia, eSwatini and Zimbabwe, in line with the Southern African Development Community (SADC) protocols.



3

International Connectivity:

- Broadband Infraco is a Tier 1 investor in WACS. A significant portion of the capacity supports key projects of national interest in South Africa and provides international connectivity to some of the largest content data providers from the rest of the world to South Africa.
- Provides the SA Government with international connectivity which provides lower cost, sustainable and efficient international bandwidth, positioning South Africa for the future

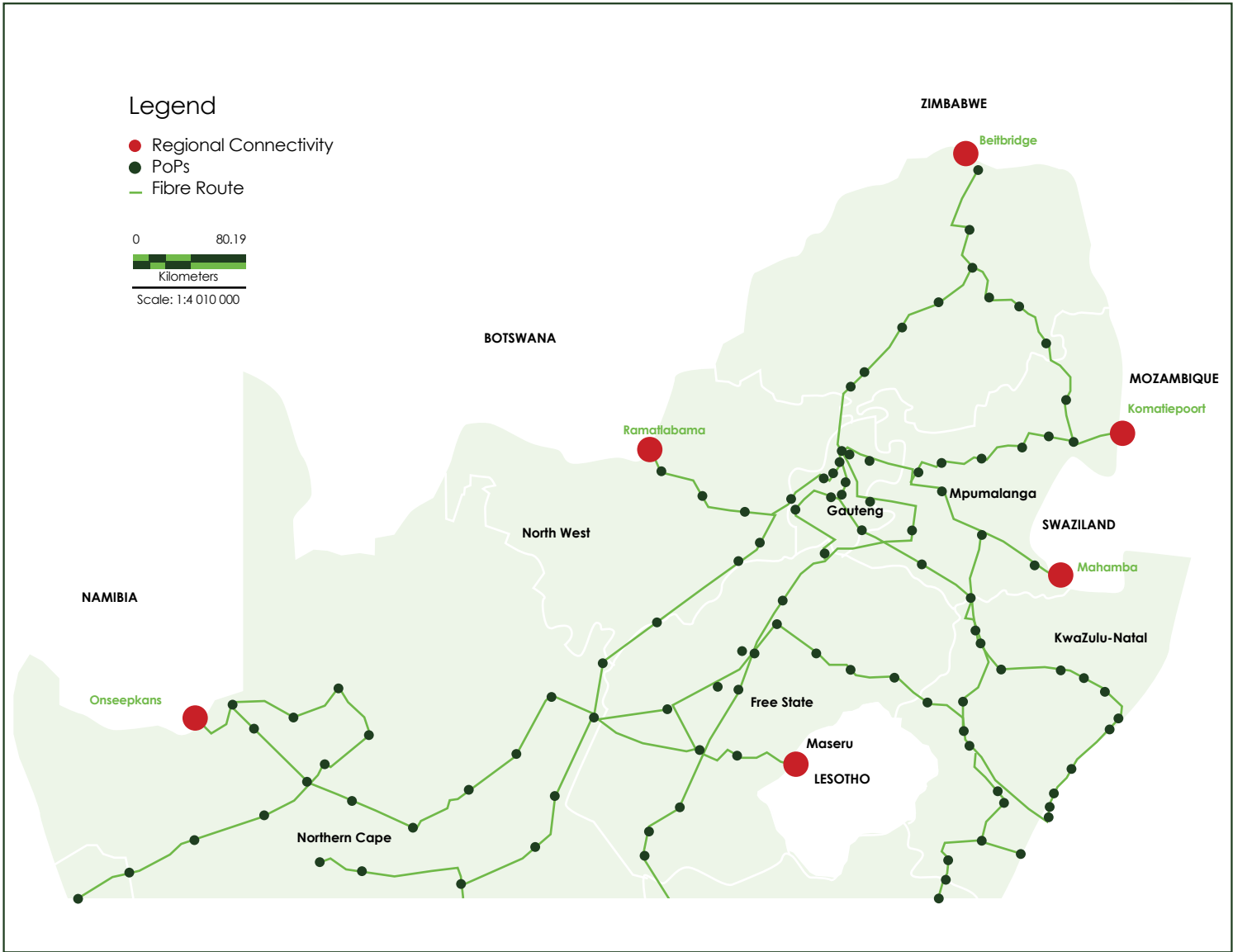
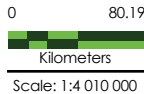


SADC Regional Footprint

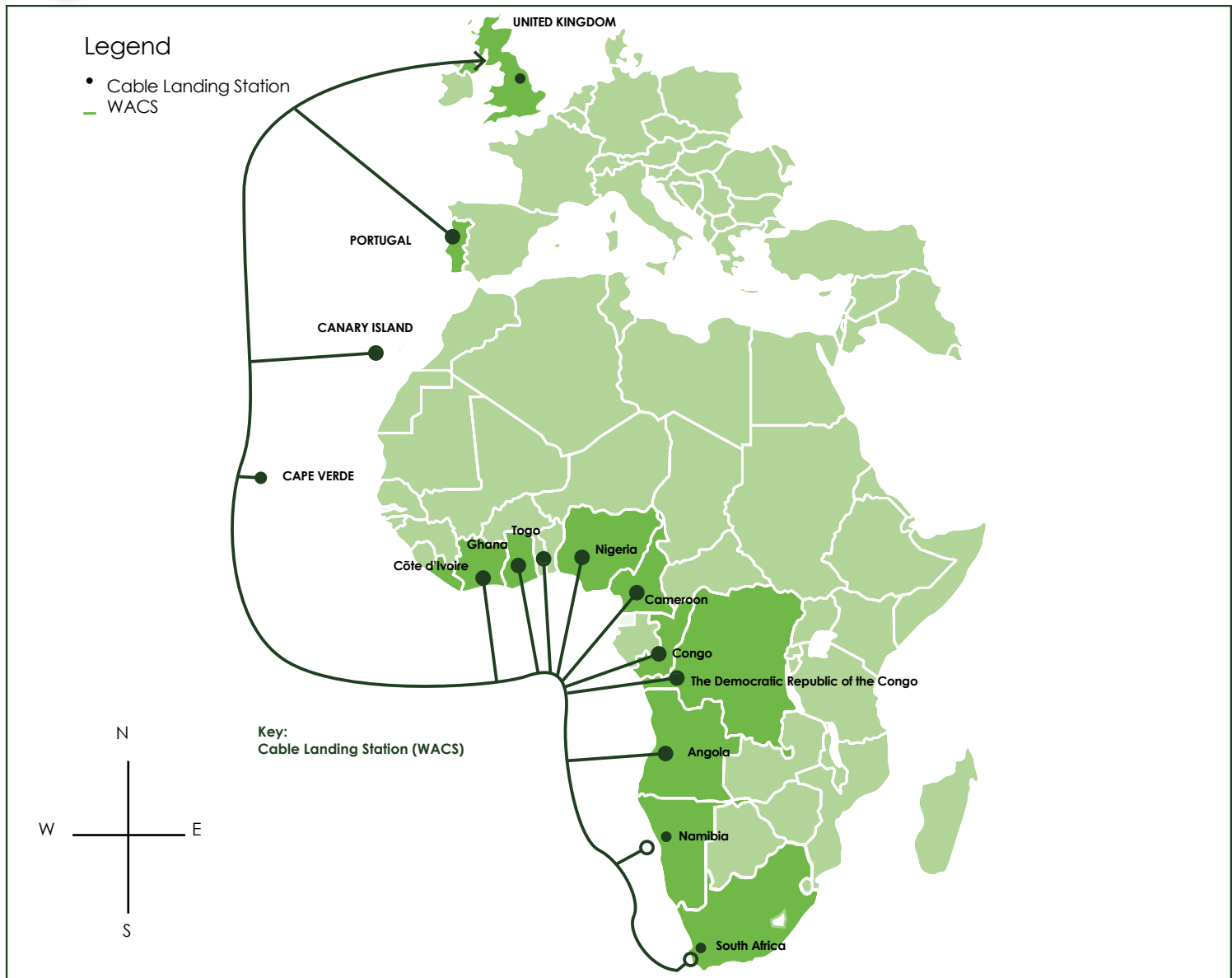


Legend

- Regional Connectivity
- PoPs
- Fibre Route



International Connectivity



Public sector



Schools



Private Sector



Municipalities



Post Office



Community Centres





Products and PoP Services

Our portfolio of wholesale products and services are based on the provision of high capacity managed bandwidth from Point of Presence (PoP) to PoP, delivered on our resilient National Long Distance network. Our technology has evolved to make use of Next Generation Dense Wavelength Division Multiplex (DWDM) technology that is capable of carrying multiples of 100Gbps within its core network.

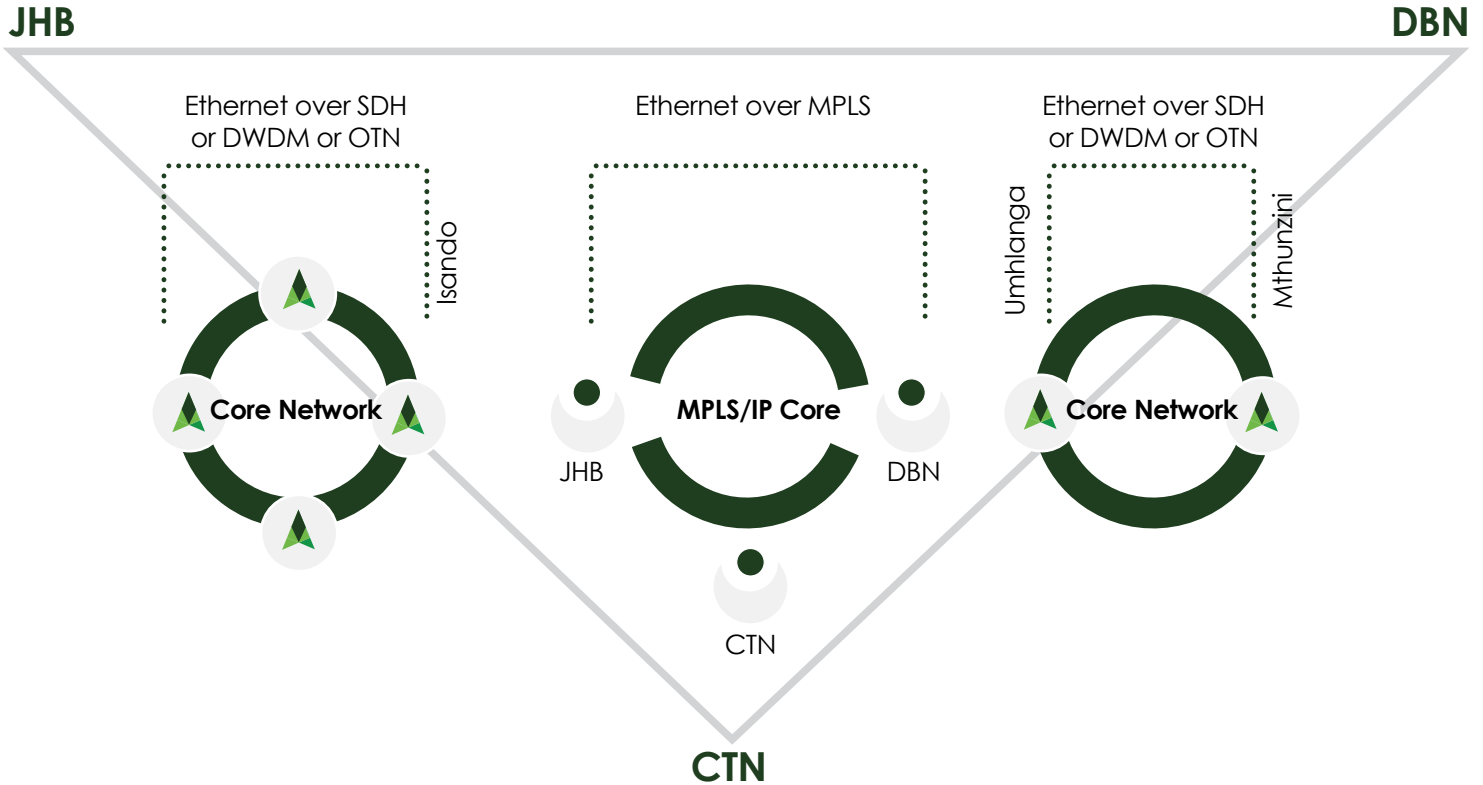
Our products suite and services is based on the Open System Interconnection model (OSI) and established on a variety of technology portfolios, including Synchronous Digital Hierarchy (SDH), DWDM or Optical Transport Network (OTN) and Carrier Ethernet.

Ethernet Services

Our Ethernet solution provides you with a range of cost-effective alternatives that meet your ever-changing business needs and its much needed flexibility.

Product Description

Our Ethernet service is available across most of our network and is delivered over our various technology interfaces, including, Internet Protocol/Multiprotocol Label Switching, SDH and DWDM/OTN; offering you capabilities ranging from 10 Mbps to 100 Gbps with robust SLAs of up to 99.5%.



Ethernet over IP/MPLS:

Our Ethernet over IP/MPLS service offers superior scalability and is available in the following smaller capacities and multiples thereof:

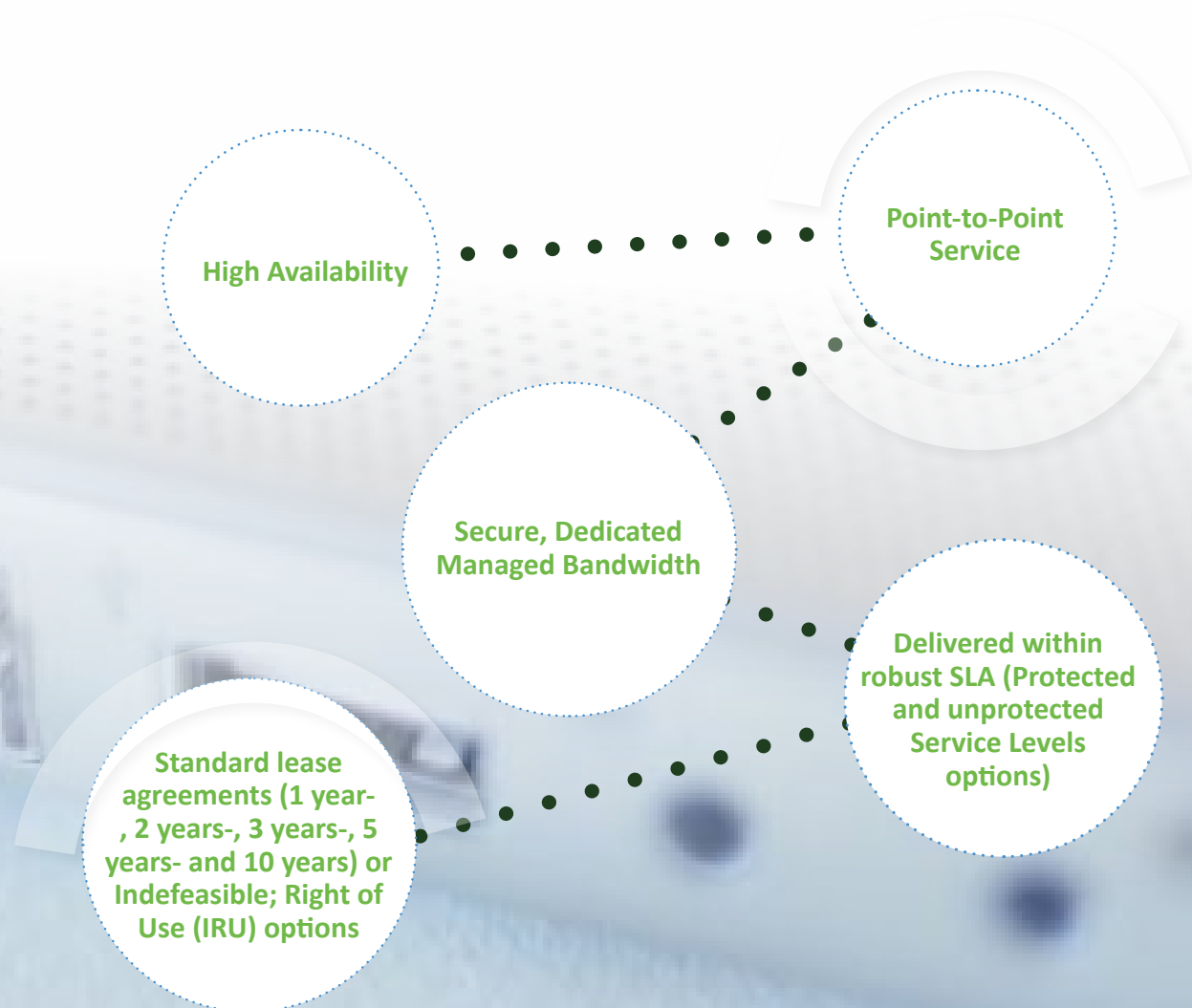
- | | | | |
|-----|---------------------|----|---------------------|
| 10 | Megabits per second | 50 | Megabits per second |
| 100 | Megabits per second | 1 | Gigabit per second |

Ethernet over SDH

Broadband Infracore offers Ethernet over SDH as well as native IP with capacities of up to 10 Gigabit per second in most regions across our network to meet all your price and service level requirements.

Ethernet over DWDM or OTN:

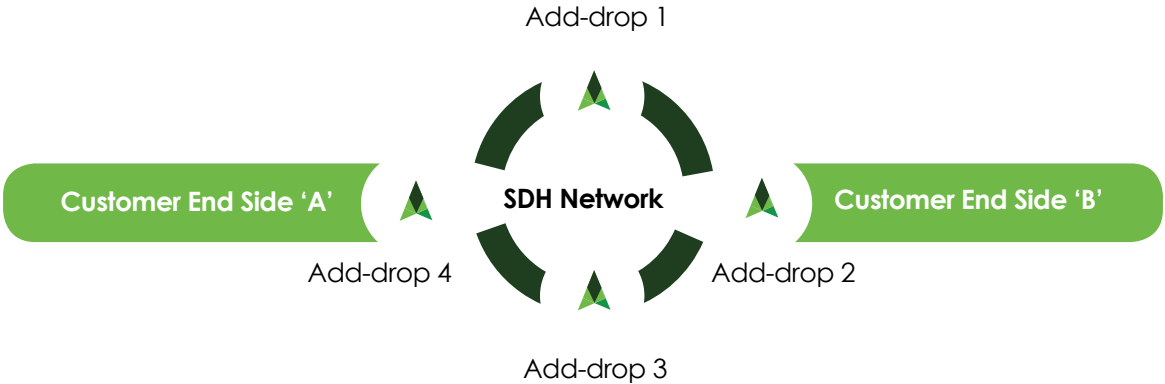
Broadband Infracore also offers Ethernet over DWDM or OTN with capacities of up to 10 Gigabit per second to meet your high bandwidth and service level requirements. Capacities beyond 10 Gigabit per second are available in some parts of the network.



SDH (Synchronous Digital Hierarchy) Services

Our SDH service offers highly available, secured and dedicated point to point high bandwidth managed service over resilient SDH network with an extensive national reach at competitive rates.

Product Description:



Bandwidth	Megabits per second (Mbps)
STM-1	155 Mbps
STM-4	622 Mbps
STM-16	2 500 Mbps
STM-64	10 000 Mbps



Scalability up
to STM-64 (10
Gigabit per
second)

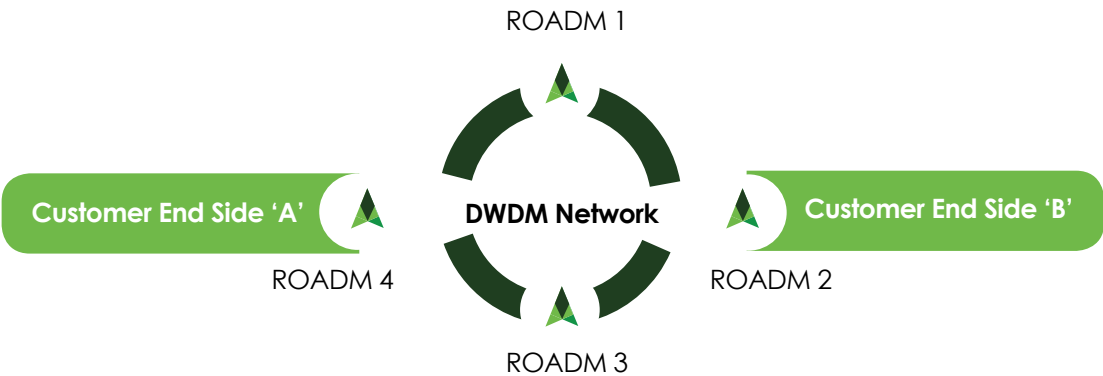
Ethernet
Capability

Direct add and drop
Capability

DWDM (Dense Wavelength Division Multiplexing) Services

Broadband Infracore's robust, state-of-the-art DWDM network provides ultra-large capacity and scalability that caters for your business' anticipated future growth. Our DWDM service offers a secure, reliable and dedicated point-to-point high capacity managed service at competitive rate.

Product Description:



This service is the ideal scalable solution for companies with growing bandwidth requirements and is available in the following bandwidths and multiples thereof:



- DWDM- Dense Wavelength Division Multiplexing
- ROADM- Reconfigurable optical add-drop multiplexer



Ultra Large
Capacity

High Availability

Sufficient cooling with
N+1 configuration
(Air-conditioning)

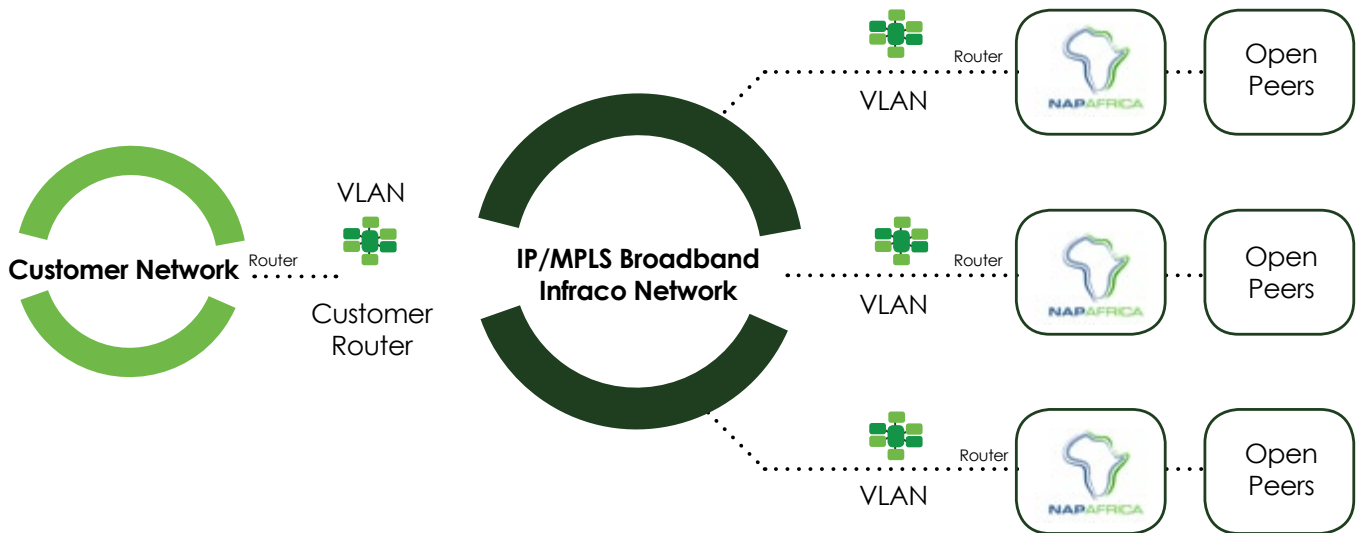
Point-to-Point Service

Standard lease
agreements (1 year-,
2 years-, 3 years-, 5
years- and 10 years)
or Indefeasible; Right
of Use (IRU) options
available.

Secure and
Dedicated
Bandwidth

Remote Peering

Broadband Infracore's Remote Peering service provides customers with cost effective Virtual Layer 2 Ethernet connectivity to the Internet Exchange Points (IXPs) via a shared platform, thus eliminating the need for customers to spend extra capital on colocation and operational costs (remote hands). With this connection, our customers benefit from enhanced network performance due to lower latency and are then able to arrange peering directly with content providers and networks operators.



Available Offering Options:

Broadband Infracore's Remote Peering provides customers with direct access to NAP Africa Internet Exchanges at Teraco Isando (Johannesburg); Teraco Durban and Teraco Rondebosch (Cape Town).

Colocation Services

Our containerised Colocation services ensure that your business' critical equipment is located in a secure and fault tolerant facility with reliable power and sufficient cooling – providing up-time levels of up to 99.5%.

Our Colocation facilities are built to the highest specification according to global best practices and are in close proximity of our long distance network. This provides you with the flexibility to bundle the Colocation services with any of our bandwidth services with capacity ranging from 10 Mbps to 100 Gbps.

Product Description

Our Colocation service is a secure, reliable and fault tolerant containerised hosting facility designed to co-locate customers' equipment that connects to our network.

Available Hosting Containers and Offering Options:

Option 1: Controlled Access container:
Full rack (42U) only.

Option 2: Shared container: Full rack
(42U) and/or half rack (21U).



Equipment and Mast Colocation

Mast Colocation offers you the opportunity to lease space on our mast at very competitive rates.

Our Mast Colocation offers the best location for your wireless equipment on a mast with a good line of sight of your targeted surroundings.

Product Description

The Mast Colocation service is designed to allow customers to lease space on a mast, owned by Broadband Infraco, to locate their equipment in order to connect to Broadband Infraco's network or alternatively erect a mast space on Broadband Infraco's premises if space allows. All reticulation services will be offered as part of the colocation agreement.



Customer Tie-Cable Maintenance Services

Our Fibre Optic Tie Cable service provides a one stop shop solution which enables on-site fault localisation resolution. This also includes routine inspection, assessments and reports to the customer.

This service ensures peace of mind for customers as it provides fixed maintenance costs, ensuring that customers' fibre optic assets are being maintained and repaired by skilled and experienced technical staff.

Customer Tie-Cable Maintenance Services - *Product Discription Continues*

As an added benefit, customers also have the peace of mind that our technical staff is able to assist their technical staff with on-site fault localisation and resolution.

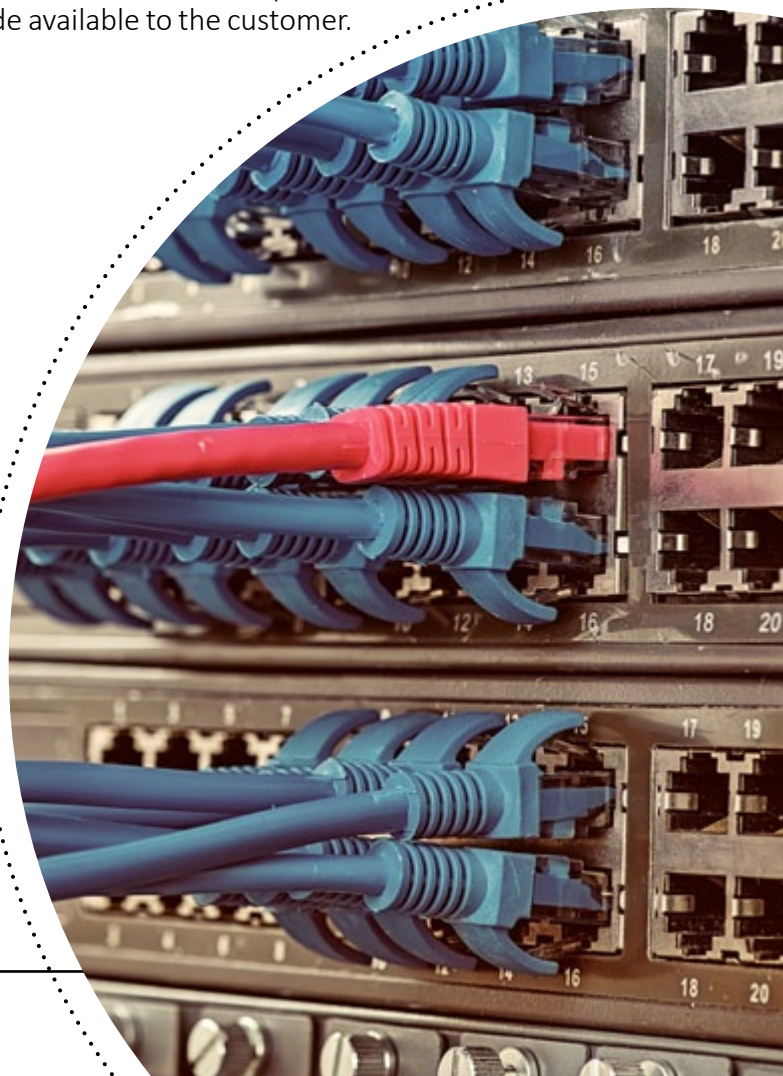
Broadband Infracore can offer clients a better SLA than them trying to conduct the repairs on damaged tie cables themselves. During the preventative routine inspections, Broadband Infracore will conduct a proper assessment on the status of the customer tie-cable; i.e. between the two respective fibre termination points. Such assessment reports will be made available to the customer.

The product is inclusive of the following services:

Preventative/routine maintenance;
Planned maintenance;
Post-fault/corrective maintenance;
Technical support and Remote Hands.

Benefits to Customers:

- Reduced operating expenses (OPEX) cost expenditure.
- No capital investment needed to purchase expensive fibre optic test and repair equipment.
- Clients do not have to acquire specialised skills to conduct maintenance on fibre optic network.
- Customer will not be exposed to equipment repair, replacement or calibration costs.
- No need for customer to increase human resource base due to increased network infrastructure footprint.
- Cost effective solution as the cost of maintenance remains fixed.





Ethernet Capability

Regular infrastructure
maintenance

Access controlled
entry through the
Network Operations
Centre (NOC)


Cooling aircon.
Remote monitoring with
camera monitoring.
MTTR of less than 8hrs.

No hassle about legal
ownership of sites

Equipped with
Dual rectifier
systems with
batteries

Power (DC): 48 V
nominal. Standby
battery autonomy of
at least 10 hours

Standby Power
(AC): Site is mobile
generator ready

An aerial night view of a city, likely New York City, with a network diagram overlay. The diagram consists of white circular nodes connected by white lines, forming a complex web. The nodes are placed over various parts of the city, including the skyline, a river, and a highway. The text is in green, and the overall image has a blue and white color scheme.

**Access to largest
IXPs via a
shared platform**

**Single point of
contact and
support**

**Flexible and granular
bandwidth options**

**Cost effective
Solution - no need for
colocation or hardware
infrastructure required
at each; IXP**

**Reduced Capital
Operational costs
and improved
operational efficiency**

NOC as a Service

Disaster Recovery NOC is a service where customers can utilise our premises to monitor their networks in cases of disaster.

Broadband Infracore runs a state of the art Network Operations Centre (NOC) located at their Woodmead Head Office, providing large screen views of the network, detailed reporting on Service level agreements (SLAs) and a customer support centre.

The NOC continuously monitors the network to ensure that all SLAs with customers are met through the use of alternative routes to ensure services availability and prompt usage of the Broadband Infracore's maintenance team to repair faults in the shortest possible timeframes.

Disaster Recovery service offering options:

- **Option 1:** Provide own internet & equipment i.e. printer, telephone.
- **Option 2:** Utilize Broadband Infracore's internet and equipment.

Third Party Fibre Optic Network Monitoring and Maintenance Services

This product is inclusive of the following services:

- Fibre optic monitoring., Preventative/routine & Post-fault/corrective maintenance.

Benefits to Customers:

- Cost saving as the customer does not have to duplicate on personnel, equipment, offices and vehicles.
- High network availability and reliability ensuring delivery of an acceptable quality of service and compliance with the performance metrics specified in Service Level Agreements (SLAs).
- Broadband Infracore's skilled technical staff is able to provide support 24/7.
- Reduced operational costs with the outsourced operations and maintenance services.

Vehicles, regional centres. Fibre maintenance and repairs.
MTTR= ≤ 8 Hrs. Experts on hand testing equipment.
Network restoration and OTDR's. 24/7 Network maintenance.



Performance & Uptime Commitments

We guarantee an uptime level of up to 99.5% for our services 24 hours a day, 7 days a week, except during scheduled maintenance or emergency changes, which will be communicated well in advance.

Broadband Infraco provides high network availability and reliability ensuring that it delivers an acceptable quality of service and complies with the performance metrics specified in the Service-Level Agreements (SLAs).

Our SLA provides our customers the opportunity to tailor relevant services to their business needs. These SLAs are available as unprotected and protected services, which translates to 98% and 99.5% respectively.

24/7 Countrywide Customer Support

Broadband Infraco's skilled engineers and technicians are able to provide onsite technical, logistical and monitoring support 24 hours a day, 7 days a week through our Network Operations Centre (NOC).

For more information, contact:

Telephone: 011 235-1600

Email: info@infraco.co.za

Website: www.infraco.co.za

Visit us at our offices:

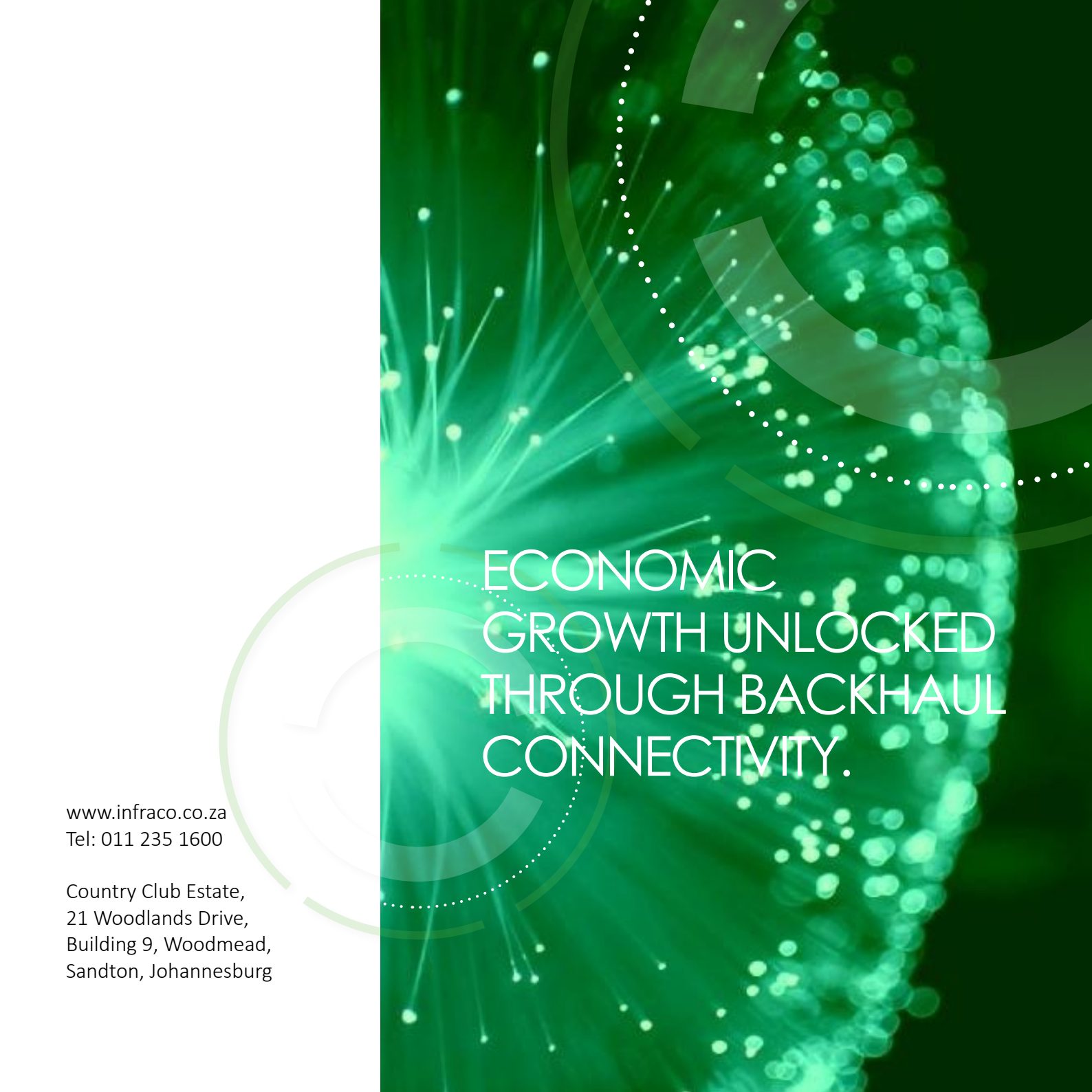
Country Club Estate, 21 Woodlands Drive,
Building 9, Woodmead, Sandton, Johannesburg

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