



Policy and economic incentives for affordable internet services

Lesotho's economic initiatives towards promoting internet affordability



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Lessons Learned (Take aways)

Background

- Geographic characteristics
- Economic characteristics

Economic characteristics

- It depends on a narrow economic base of agriculture, textile manufacturing, remittances, and regional customs revenue.
- **Population:** As at 2023, the BOS reported the population to be at 2,330,318 and $\frac{3}{4}$ of the people live in rural areas and engage in animal herding and subsistence agriculture.
- **Agriculture:** Lesotho produces less than 20% of the nation's demand for food.
- **Imports:** Lesotho relies on South Africa for its economic activity where 85% imports of the comes from South Africa, including most agricultural inputs.
- **Exports:** Diamond mining in Lesotho has grown in recent years and accounted for nearly 35% of total exports. Lesotho gains royalties from the South African Government for water transferred to South Africa from a dam and reservoir system in Lesotho.
- **Remittances:** Households depend heavily on remittances from family members working in South Africa in mines, on farms, and as domestic workers, though mining employment has declined substantially since the 1990s.
- **Regional customs revenue:** Lesotho is a member of the Southern Africa Customs Union (SACU). and from SACU revenues are about 26% of total GDP in 2016;



Introduction

Introduction

Communications services are critical to any country's economic success and social cohesion, as such infrastructure coverage, international connectivity, pricing, capacity and network reliability have become an integral part to consumers, business, and government.

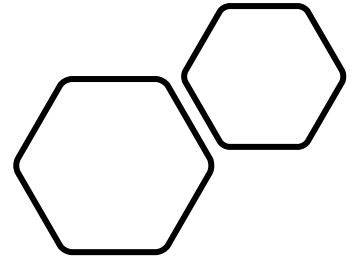
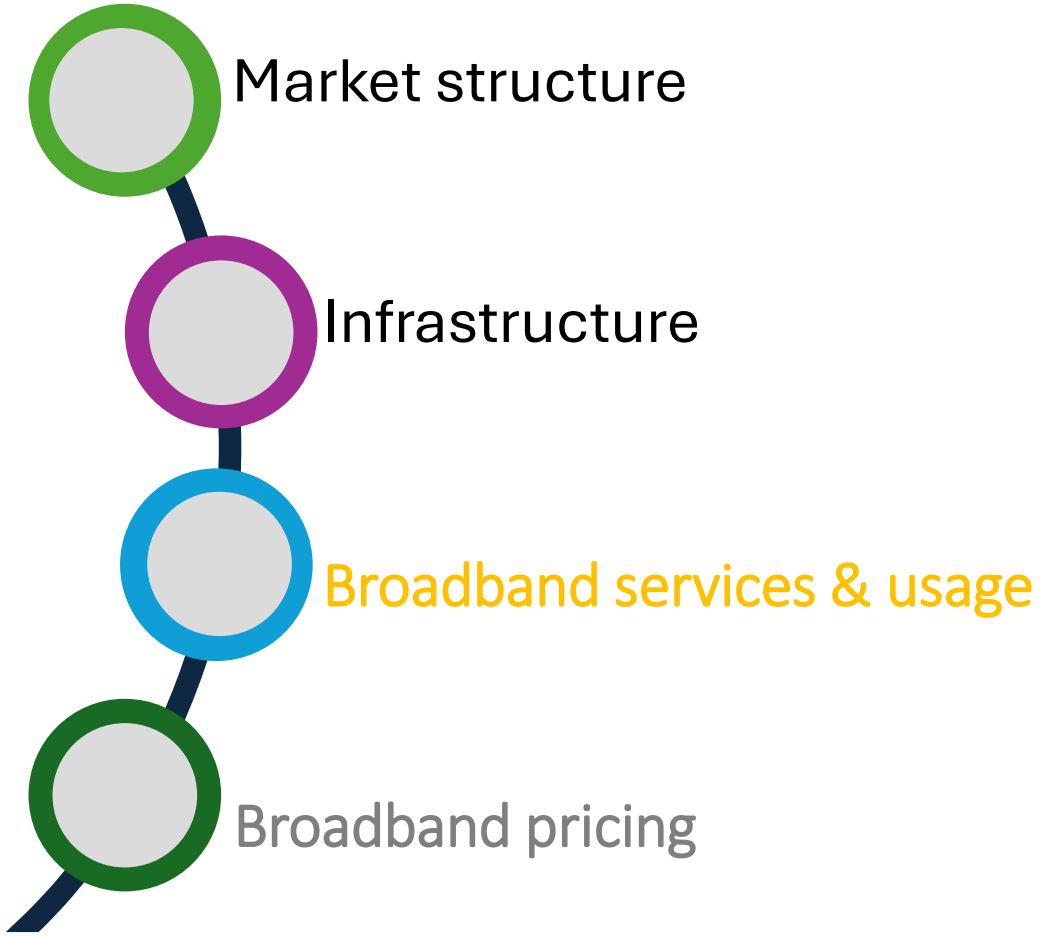
The importance of communications infrastructure has been highlighted in the Lesotho's National Sector Development Program II and the World Bank Report on Digital Economy Diagnostics Report for locational targeting of policy and investment interventions.

Highlights on the roles of the three Arms of the communications sector

While the responsibility to build and maintain communications infrastructure lies with the **communication service providers**, the **government** has the obligation to develop policy frameworks that are enablers to stimulate infrastructure rollout and the **regulatory Authority** has the responsibility to create conditions that will foster investment, innovation, efficient use of the finite resources and to ensure effective competition.



STATE OF BROADBAND IN LESOTHO



Market Structure



Mobile services were introduced in Lesotho in 1996 by Vodacom Lesotho and Econet Telecom Lesotho followed in 2001



There are two telecommunication service providers. Both are vertically integrated and provides fixed and mobile services at wholesale and retail markets (from ISPs to individual end-users).



There are currently five Internet Service Providers (ISPs) in the market.



There are several (ICT) service providers. Though not regulated, they play an important role as sellers of software and hardware systems, as ICT trainers, systems integrators and retailers of end-user devices.



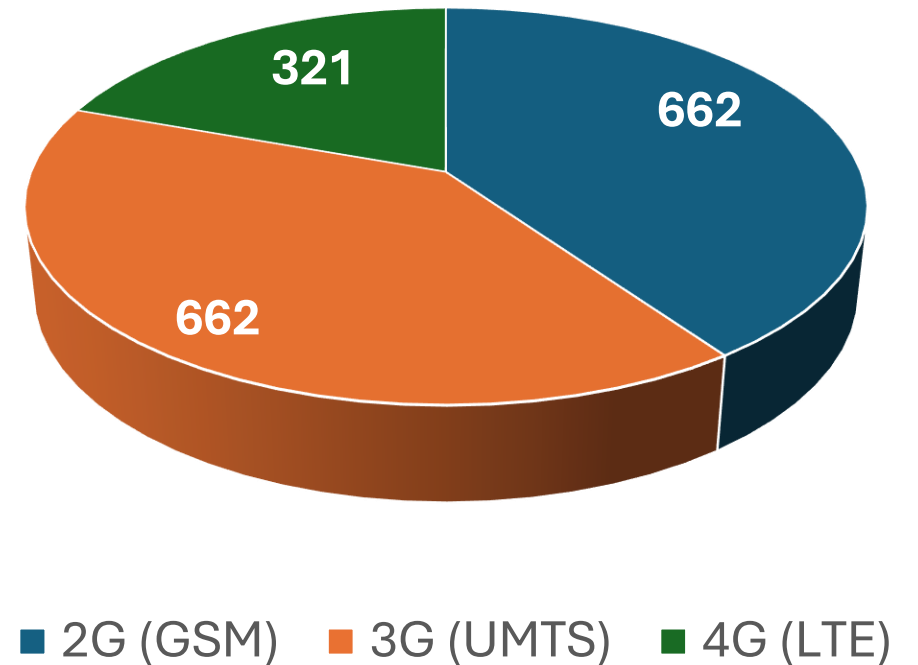
One infrastructure service provider

National Mobile Infrastructure

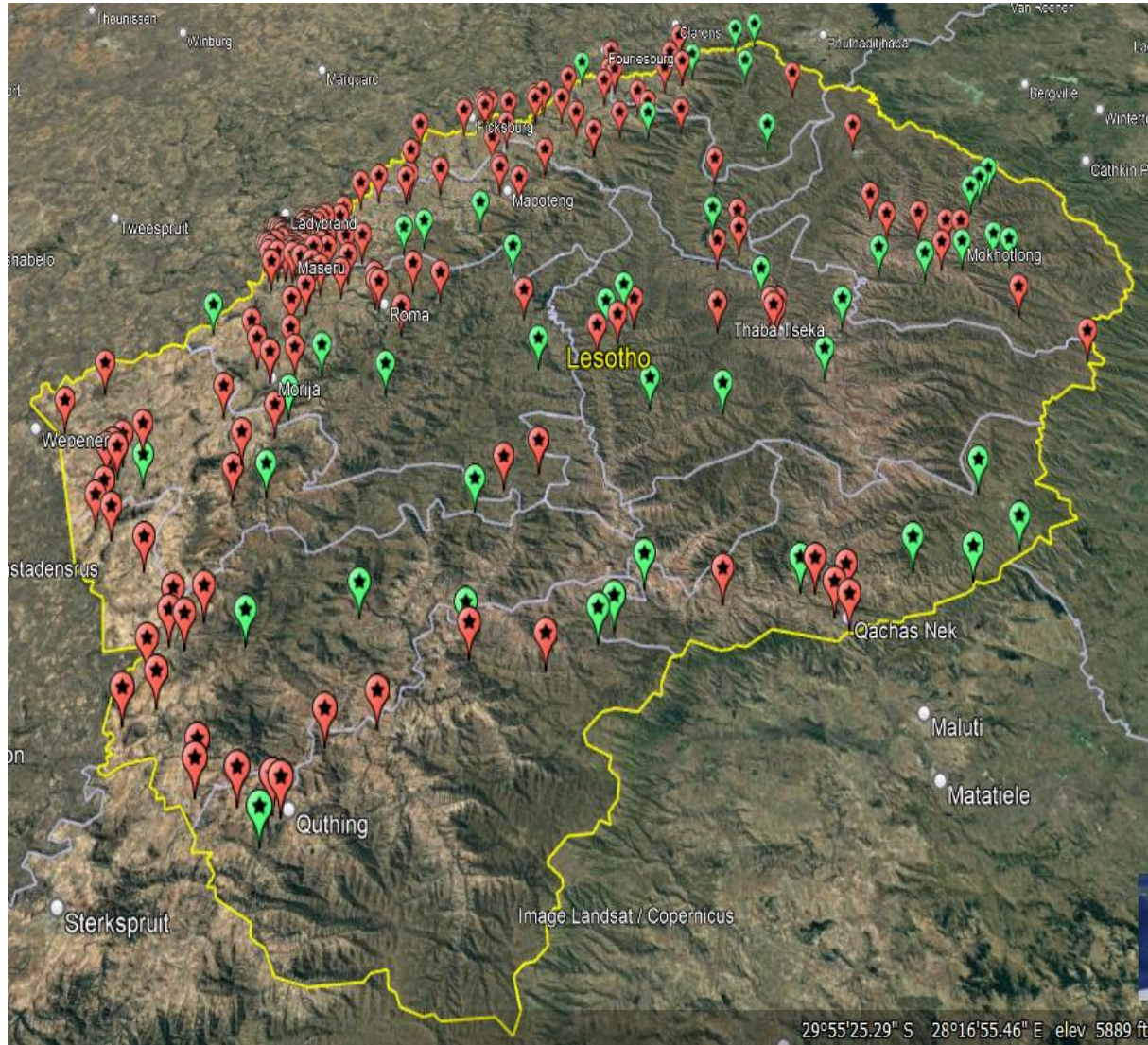
The national mobile infrastructure networks comprise of 2G (GSM), 3G (UMTS) and 4G (LTE) mobile base stations.

There are now 662 mobile base stations which have 3G network. 5G network is currently under a trail. This will pave a way for the rollout of 5G mobile broadband.

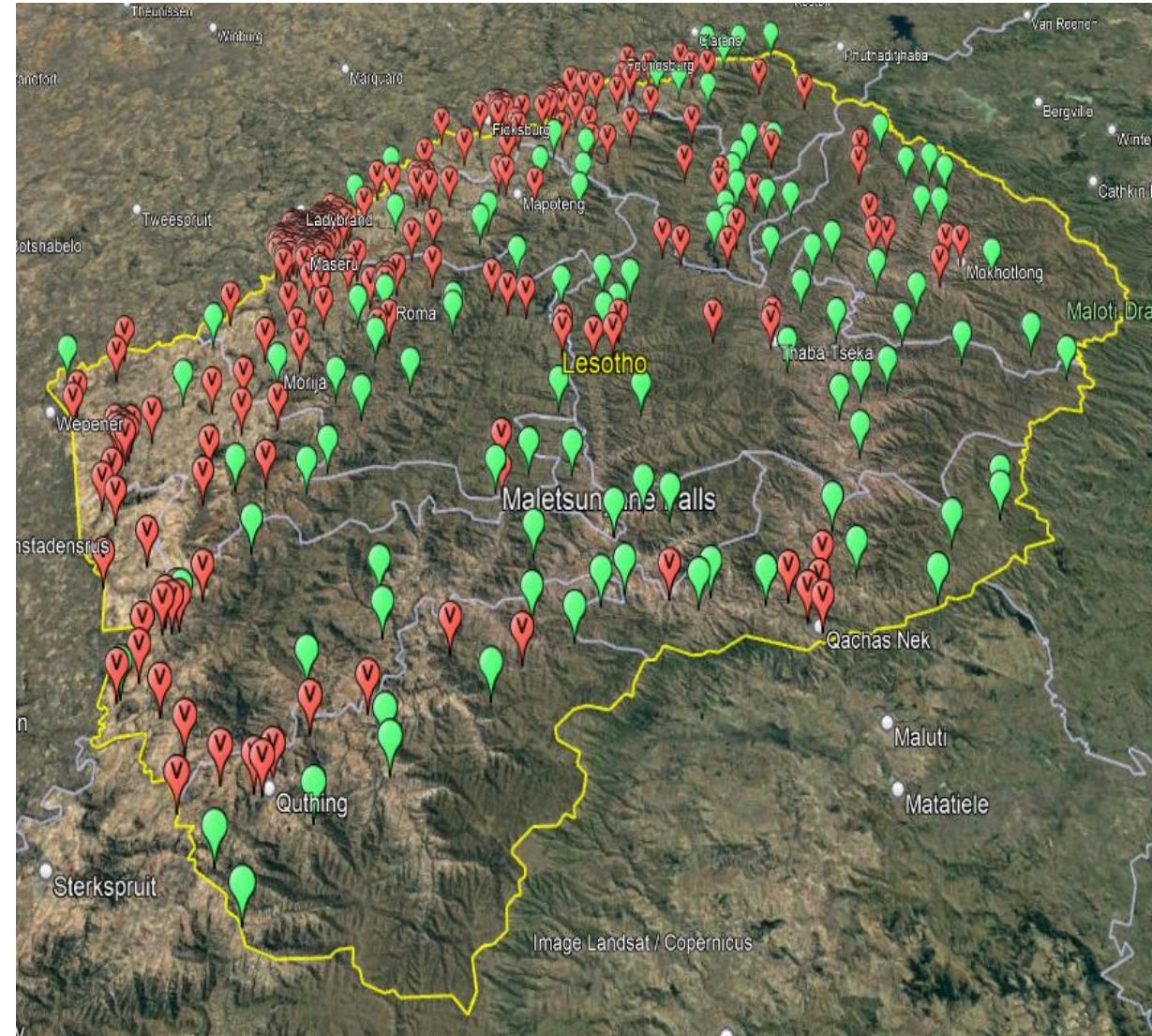
The base stations are predominantly mounted on radio towers, but there are some on roof tops of tall buildings in the capital city, Maseru.



Mobile Network Coverage



Econet mobile sites



Vodacom mobile sites

Mobile station sites in red are powered by grid and green by Solar

Land coverage is 98% & population coverage is 95.8% - Lesotho's terrain and the sparsely populated villages in the rural areas make it very difficult to achieve 100% population coverage.

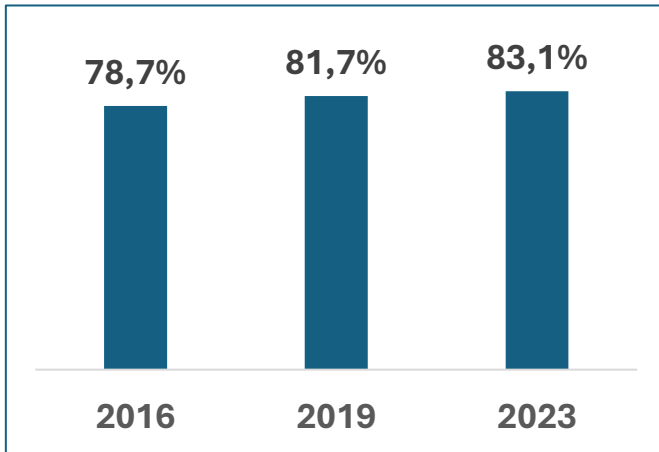
Fiber Optic Cables Network



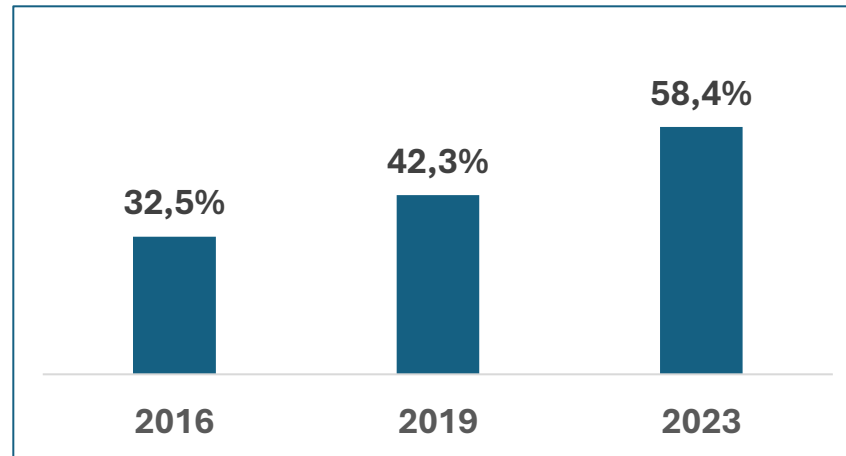
Ask more about this map, what is the meaning of the blue flags, meaning of different lines.

Broadband access & Usage

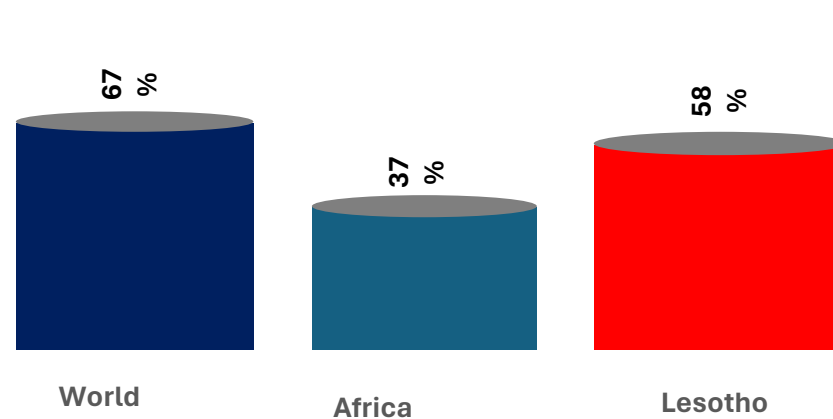
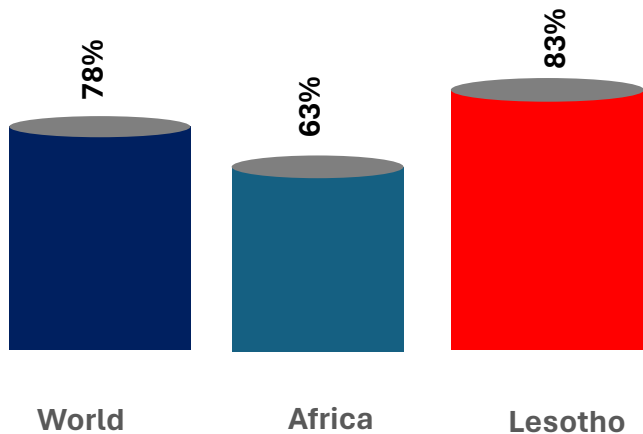
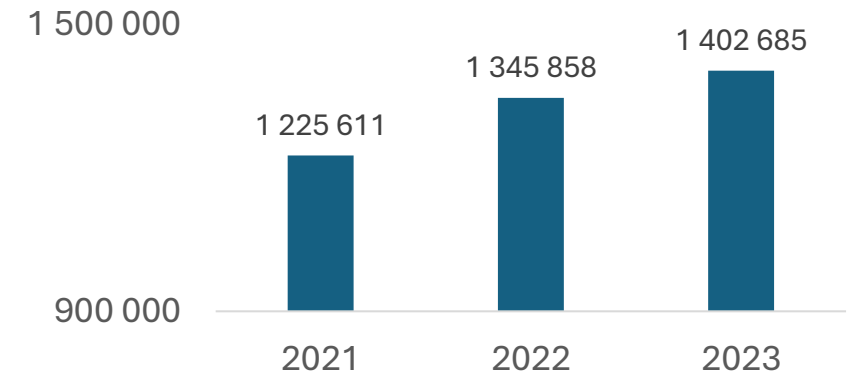
Percentage of Individuals owning mobile phone



Percentage of Individuals using Internet



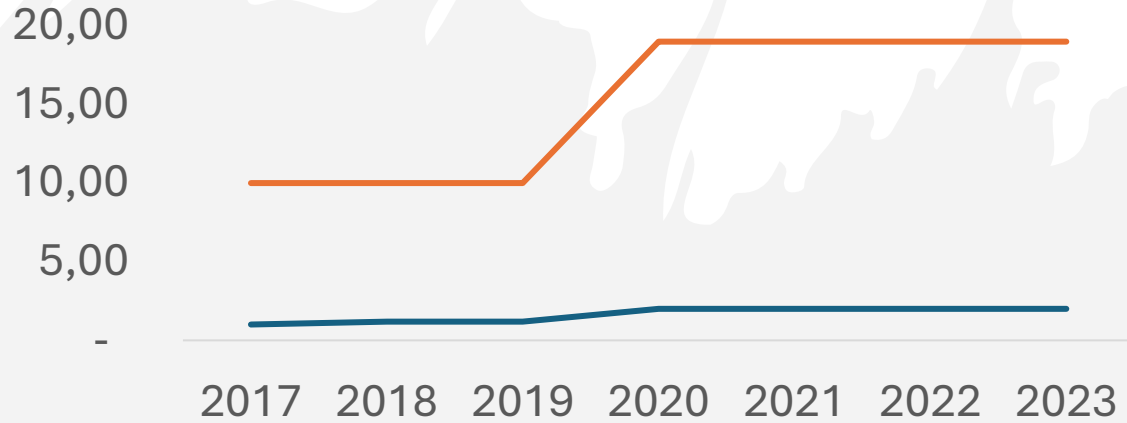
Broadband subscriptions



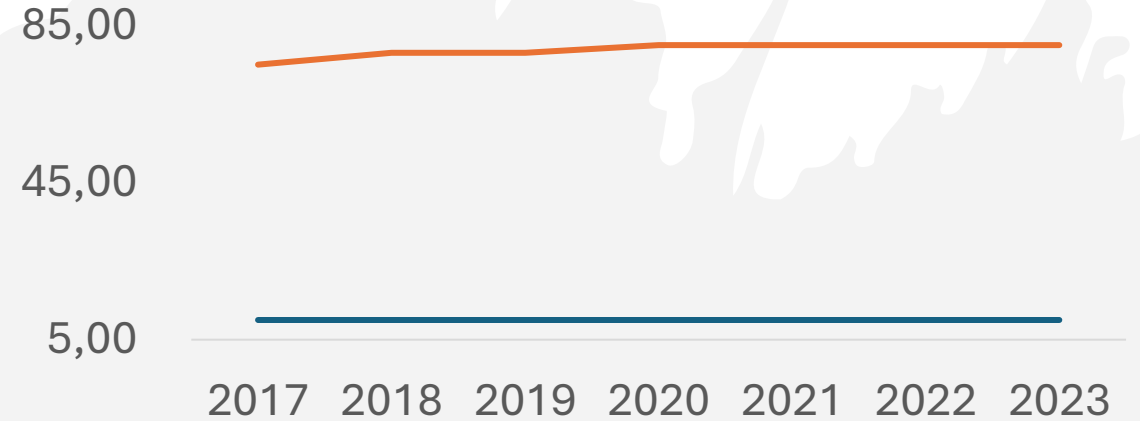
Broadband penetration	2023
Mobile Broadband Penetration	69.1%
Fixed Broadband Penetration	0.44%
Total broadband Penetration	69.5%

Broadband Bundle prices

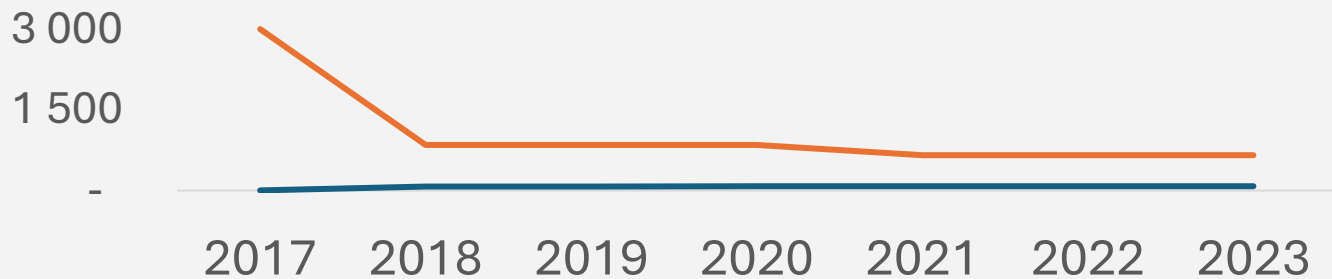
Daily Bundle prices



Weekly Bundle pricing



Monthly Bundle pricing



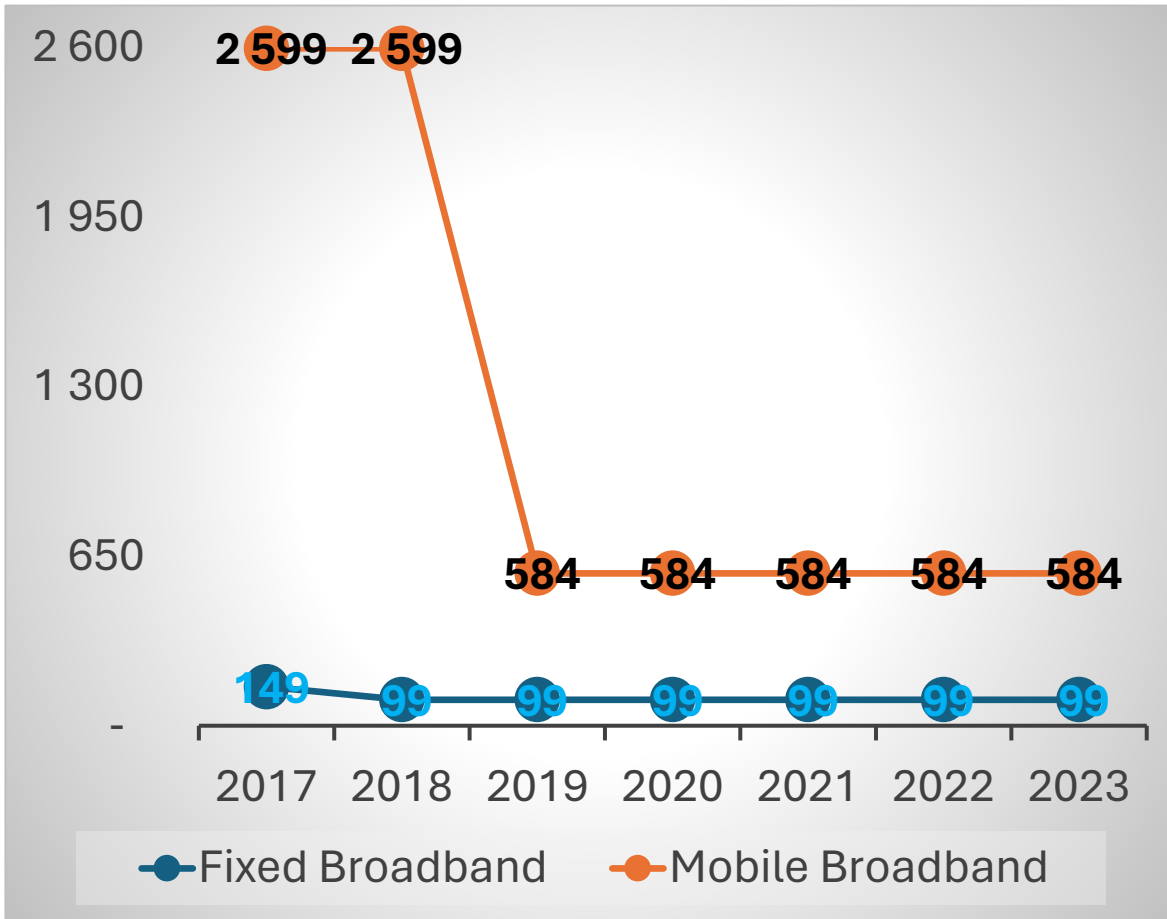
Daily bundle: cheapest is M2; Most expensive is M19

Weekly bundle: cheapest is M10; Most expensive is M80

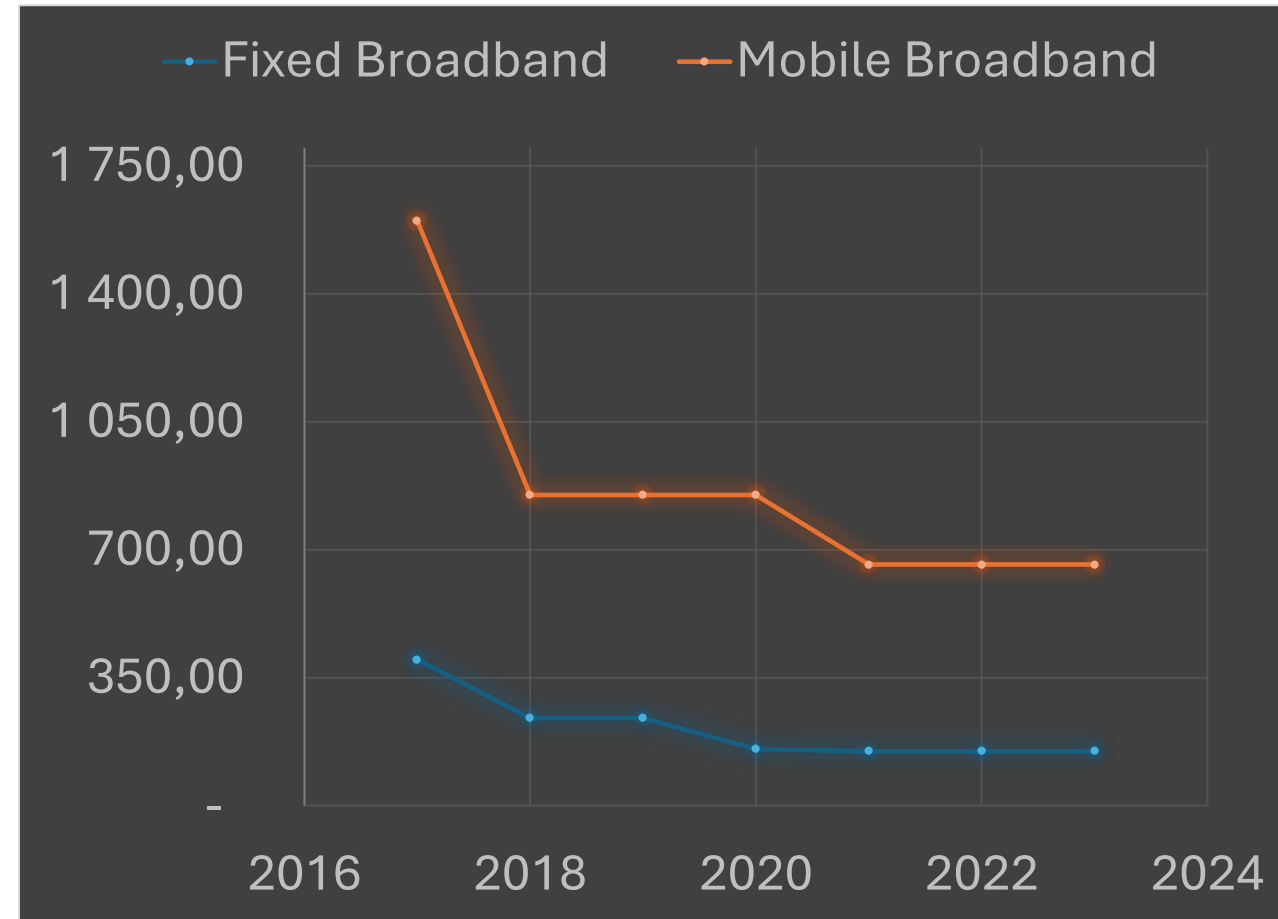
Monthly bundle: cheapest is M80; Most expensive is M660

Fixed & Mobile Broadband Prices

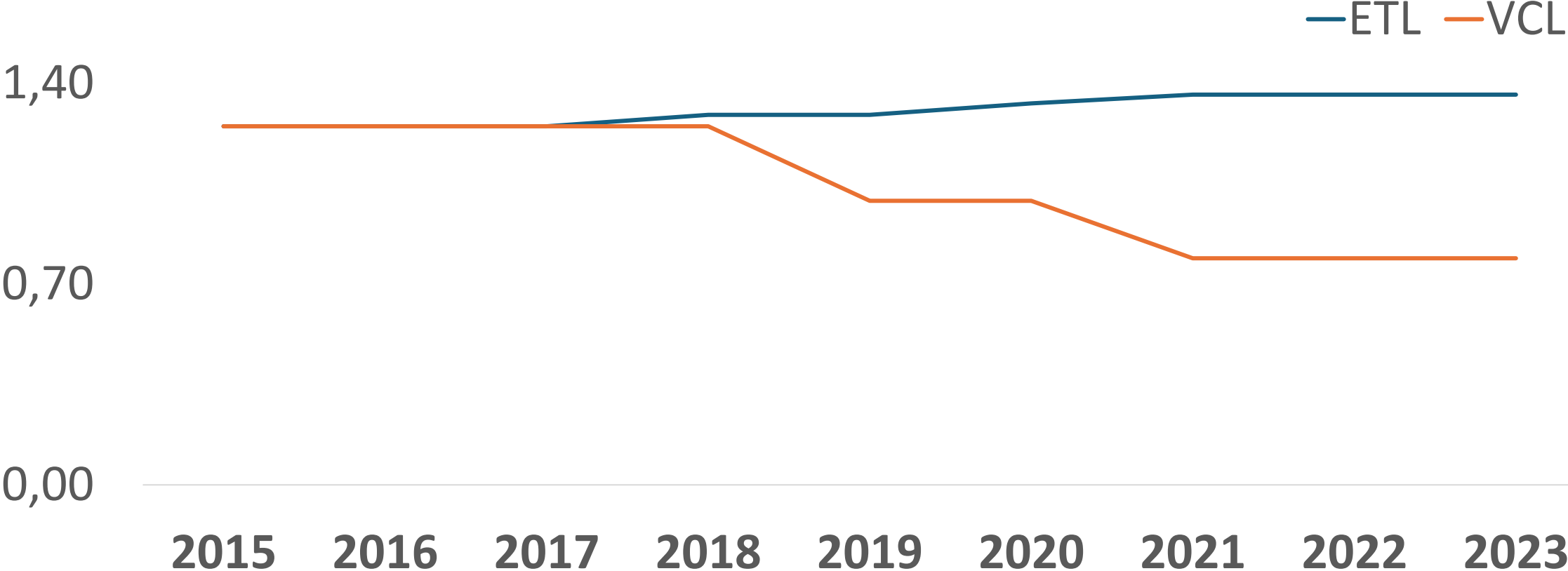
Low usage (5GB) Broadband Prices



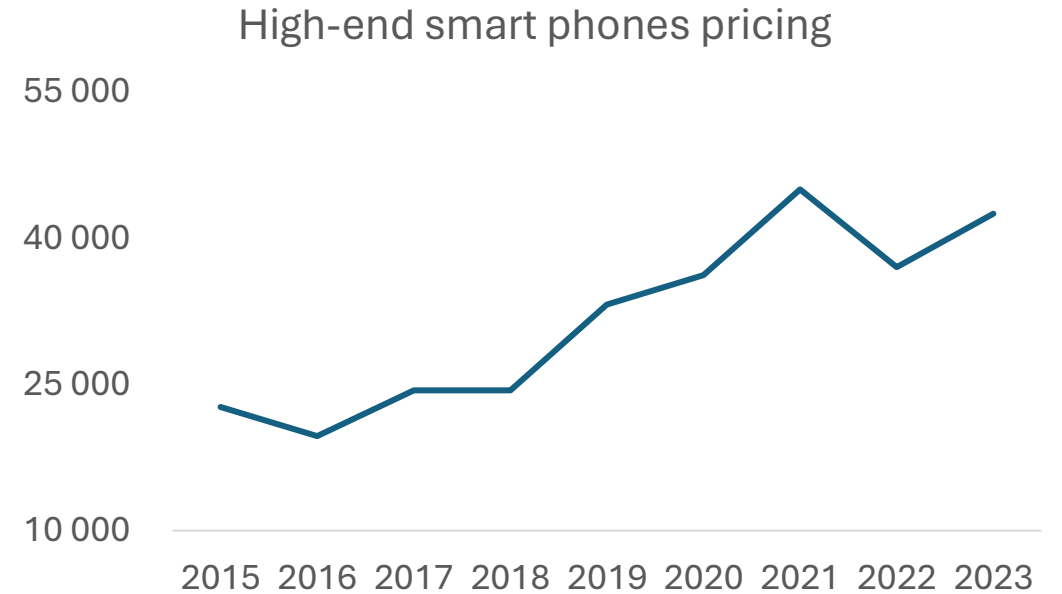
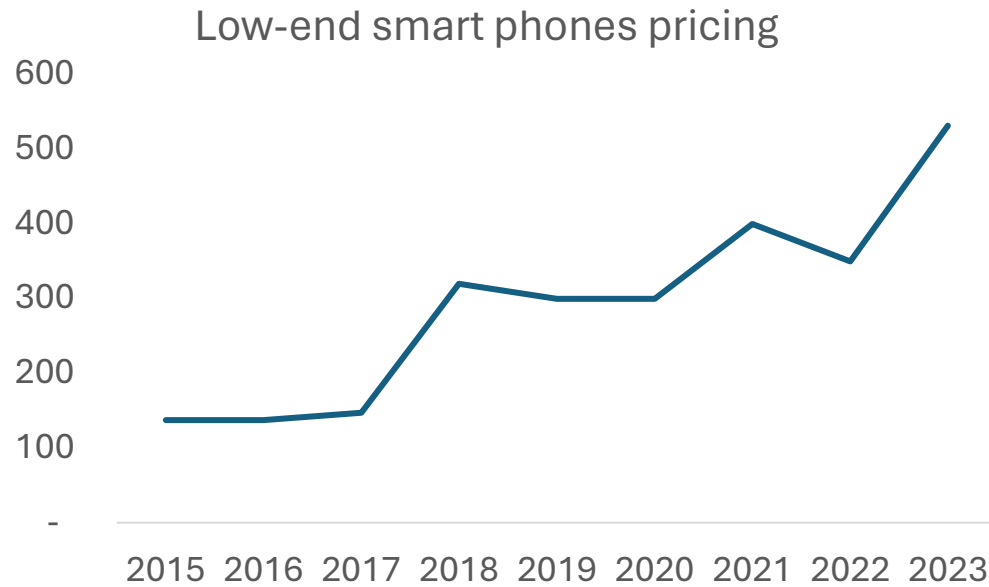
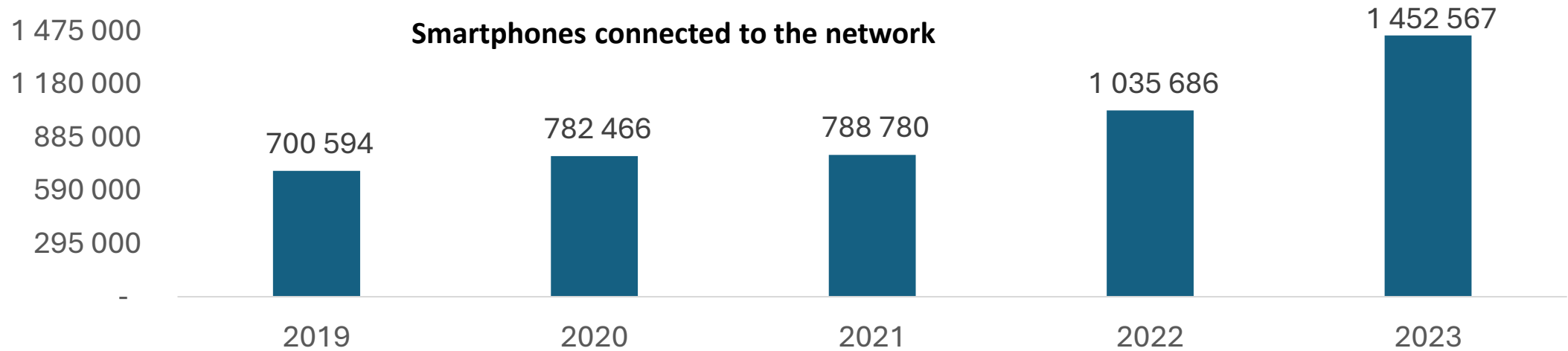
High usage (20GB) Broadband Prices



Data tariffs (Maloti) per MB



Smartphone Uptake and Pricing



Low end smart phones are dominantly operator subsidized phones. Prices were affected by increase in VAT on telecommunication services from 5% to 15%



Policy & Regulatory Frameworks

Policy and Regulatory Frameworks



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(e) protect the interests of consumers of communications services;

Policy Framework

National Strategic Development Plan
II

Regulatory Framework

Lesotho Communications Policy of 2008

2008

LCA (Administrative) Rules 2016

2016

2012

Lesotho Communications Act 2012

2023

Licensing Classification and Fees Rules 2023

Initiatives on broadband services

- Regulatory initiatives
 - Participation in WIOCC
 - Establishment of LIXP
 - Reduction of fixed access spectrum pricing to encourage participation of ISPs
- Service provider initiatives
 - Subsidized devices
 - Bundling of devices with communication services

Regulatory initiatives



EASSY Fibre-Optic Cable Connection

The regulator, on behalf of Lesotho participates in the Eastern African Submarine Cable System (EASSY) project as a shareholder of West Indian Ocean Cable Company WIOCC. WIOCC brings international Internet bandwidth through points of presence (PoP) at the LIXP located at LCA premises. Lesotho has about 18 x STM1 Internet capacity from WIOCC



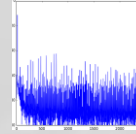
Lesotho Internet Exchange Point (LIXP)

The LIXP provides a point of presence for Internet Service Providers in Lesotho. This single point allows exchanges of Internet traffic between the service providers directly, without a need of using their respective transits to communicate with each other. Attached to the exchange point is a content provider Google, which provides content to these service providers for quicker access to their respective subscribers.



Actively peering to the LIXP

Vodacom Lesotho (PTY) Ltd
Econet Telecom Lesotho (PTY) Ltd.
LEO (PTY) Ltd
Lesotho Electricity Company Communications (PTY) Ltd
Comnet (PTY) Ltd.
Google Global Caches



Reduction of fixed access spectrum pricing

The Licensing Classifications and Fees Rules of 2018 introduced broadband fixed wireless access spectrum with a low fee to encourage participation of ISPs



Universal Service Fund

Universal service fund was initially established to rollout access to remote and underserved areas to promote Rural connectivity for access Internet connectivity for schools



Infrastructure sharing guidelines

Introduction of infrastructure sharing guidelines to reduce infrastructure costs

Service providers initiatives

low-cost smart phone

Introduction of low-cost smart phone from 2014 to lower smartphone prices. Now at 60% smartphone penetration rate

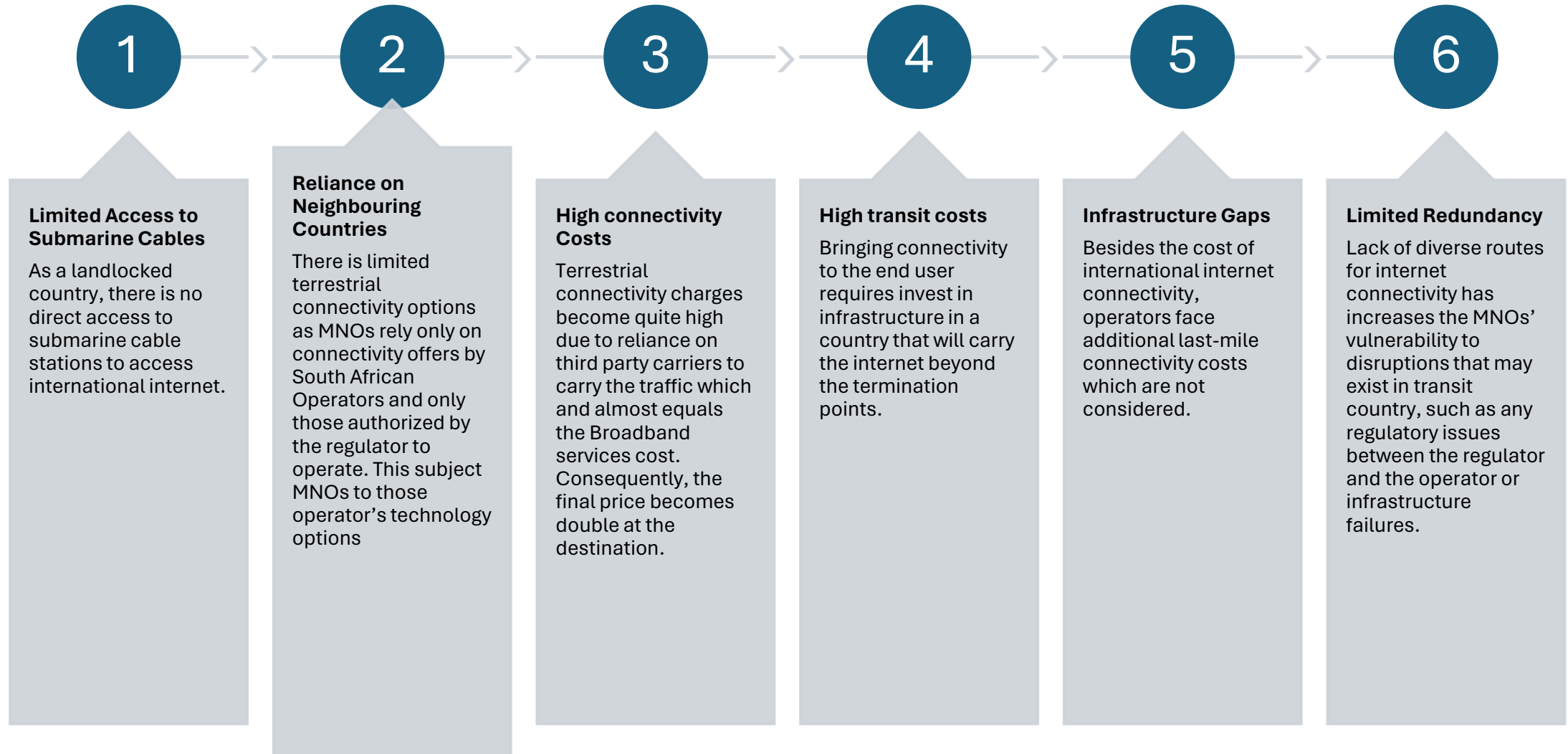
free access to websites

Provision of free access to information on health, and educational websites as a means to lowering connectivity costs


Discounted data bundles

low-cost monthly data bundles for school connectivity and zero-rated access to school websites

Challenges



Way Forward

- 
- ❑ **Increase service providers:** As part of efforts to provide high speed, low latency internet access to even most remote areas of the world, there is need for a satellite service provider. This will relief Lesotho from high infrastructure costs, among others.
 - ❑ **Strengthen basic digital skills:** there is need to equip consumers with knowledge and skills to be able to use smartphones. Basic skills to survive through digital transformation include navigating a smartphone, accessing relevant content, using mobile money, and understanding privacy and security. Training should be provided so users can optimize the use of their devices as well as gain confidence.
 - ❑ **Building 4G infrastructure:** this is necessary to ensure broadband uptake and usage. In turn, this will encourage Smartphones uptake
 - ❑ **Boosting 4G adoption:** there has to incentives in place to stimulate demand for digital services for driving better quality and improving digital skills of users as well as improving affordability of connectivity and devices
 - ❑ **Tax breaks:** communication equipment and services should be excluded from surcharges to reduce their cost and promote investment



Thank you

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