ADDRESSING LAST MILE CONNECTIVITY

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THE USF

• Establishment and Mandate
• Duties and functions of the Authority
• The USF Committee
• Functions of the Committee
• Financing
• Project consideration by the Authority
Establishment and Mandate

- Established as provided for by the Communications Act (2016), Section 157

Functions:

- **Offer subsidies** on a competitive basis to licensees in order to provide them with incentives to provide universal access in areas that are not economically viable or that are marginally viable without subsidies;

- Provide other financial incentives and assistance;

- Meet administrative expenses associated with the execution of the duties, functions and responsibilities of the Universal Service Fund Committee, the management of the Universal Service Fund, publication and independent audit costs of annual reports of the Fund, and the staff costs for the implementation of the Fund, which shall not exceed a certain amount, as determined in regulations made under this Act; and

- Conduct research and consultancy assignments related to universal access.
Duties and functions of the Authority

to define the expected components of universal services and the remote areas that are unserved or under-served areas and communities;

to set out the operations to be undertaken to ensure universal services;

to propose annual and multi-annual universal access programmes and budgets, as well as activity, plans to be submitted to the Universal Service Fund Committee;

to define, plan and co-ordinate the implementation and monitoring of the universal access and universal service;

to designate one or more licensees to be in charge of the universal service or components of the universal service; and

to ensure that the provision of universal services is made on affordable tariffs that are accessible to all
The USF Committee

The Committee is established by the Authority (Section 159 of the Act)

It is composed of:

- one member nominated by each of the communications services sectors;
- one member nominated by the consumer protection organizations;
- the Director-General of the Authority; and
- One representative from the government, as identified by the Minister.

• Members of the Universal Service Fund Committee shall hold office for a period of three years and shall be eligible for re-appointment to one more term.
How is the Fund financed?

(a) To review all proposed annual and multi-annual universal access programmes and budgets, as well as activity plans submitted by the Authority; and

(b) provide written comments and specific recommendations for improving the proposed annual and multi-annual universal access programmes and budgets, and the activity plans.
How is the Fund financed?

- Operators' levy as prescribed in the licensee, which shall be set by the Authority and reviewed from time to time;
- Moneys appropriated by government of Malawi through Parliament;
- Grants, subsidies, donations, gifts and subscriptions from government or any other person;
- Competitive minimum subsidy auctions;
- Public access projects designed to generate income for long-term financial self-sustainability; and
- Funds made available by the Authority
# The Last Mile

## Component Name | Also Known As | Brief Description | Typical Distances | Common Infrastructure Technologies
---|---|---|---|---
International cross-border traffic | International bandwidth | Connects countries to other countries and the world | Thousands of km | Fibre-optic cables (undersea and terrestrial), satellite
International transit traffic | Transit | Applies to traffic crossing countries to land-locked countries, adding to international bandwidth costs | Hundreds to thousands of km | Fibre-optic cables (undersea and terrestrial), satellite
National backbone network | Core | Connects major network servers and data centres (PoPs) within a country | Hundreds to thousands of km | Fibre-optic cables (terrestrial and some undersea), satellite
Middle-mile network | Backhaul | Connects core network to regional PoPs | Tens to hundreds of km | Fibre, microwave, satellite
Last-mile network | Access | Reaches end users with connectivity from regional PoPs | Tens of km | Wireless (cellular: 2G, 3G, 4G, 5G, fixed wireless access, Wi-Fi, satellite, etc.); wired (fibre, copper, coax, etc.)

Source: ITU - The Last-mile Internet Connectivity Solutions Guide
June 2019 summary report, they wrote:

“We recommend that by 2030, every adult should have affordable access to digital networks, as well as digitally-enabled financial and health services, as a means to make a substantial contribution to achieving the SDGs.”

Source: The age of digital interdependence – the United Nations Secretary General’s High-Level Panel on Digital Cooperation
Similarly, a report released by the New European Union-African Union Digital Economy Task Force in June 2019 identified its first goal as follows:

“1. Accelerate universal access to affordable broadband”; and a 2018 report by the Pathways for Prosperity Commission on extending universal access focused on meaningful connectivity.

THE LAST MILE

There are four overarching reasons why billions of people remain offline:

1. Lack of Network Infrastructure availability
2. Lack of affordable internet service
3. Lack of perceived relevance
4. Gaps in skills and ability
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IT IS ESTIMATED THAT .....  

• Up to 750 million people worldwide live in areas where there is a “coverage gap”, i.e. no signal from any mobile broadband network (at least 3G)

• A further 3.28 billion people are in the “usage gap”, i.e. they live in an area covered by a mobile broadband network but are not using the mobile Internet, for reasons related to affordability (of service and devices), relevance, and user skills.

According to GSMA (the association of network operators)
ICT ACCESS MARKET REPORT - 2019

433 TAs
233 TAs without mobile coverage

18 Million people
2 Million without Mobile coverage

Market Demand
2 Million without Mobile coverage
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ICT development and Innovation

**Promote e-education**
- Connect a school project – 250 by 2027
- Connect 10 TTCs to internet by 2027
- Connect at least 25 institutions with PWD to internet

**Enhance broadband coverage**
- Support at least 28 community-based ISPs by 2027
- Facilitate construction of 76 towers by 2027
- Specific targeting of potential investors to open device assembly points – 3 by 2027
- Digital Skills for educators & learners

**Promote e-health**
- Provide broadband services to 33 public hospitals by 2027
- Support hard to reach health institutions with alternate power

**Promote e-commerce**
- Promote digital skills for rural SMEs in different communities by 2027
- Develop e-commerce platform
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Lack of Network Infrastructure availability:
• Community Broadband operators
• Installation of mobile network towers

Promote e-education
• Connecting Schools
• Public institutions (Post Offices, Government Offices etc)
• Teachers Technical Colleges, and
• Institutions for People with Disabilities to internet
Community Networks can gain access to spectrum, including the use of unlicensed spectrum, sharing licensed spectrum, and innovative licensing.

- Call for EOIs was done
- Request for proposals
- Design of Community Broadband Framework
- Engagement of CNs
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BOSCO Uganda, connecting communities through solar | KICTANet Think Tank
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Gaps in skills and ability

Around 15 per cent of the world’s population, or an estimated one billion people are persons with disabilities.¹

According to the 2018 Disability & Development Report² from the UN, “persons with disabilities are at a disadvantage regarding most Sustainable Development Goals”, and “concrete action is needed to include the world’s one billion persons with disabilities, as both agents and beneficiaries of development”.

Barriers to inclusion and participation are exacerbated by the lack of access to affordable, relevant assistive technology. Only one in 10 people have access to the assistive technology they need to live independent and autonomous lives.

Digital accessibility is recognised as a key priority in several global commitments, including the Convention on the Rights of Persons with Disabilities (CRPD), the Sustainable Development Goals (SDG) and the UN Disability Inclusion Strategy, with the core aim to ensure “no one is left behind” in our increasingly digital world.
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Lack of Affordable Internet:

What value is the derived from a digital service?
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Gaps in skills and ability

Recommendations from GSMA on digital inclusion:

- Conduct consumer insights research to better understand the requirements, circumstances and views of persons with disabilities and the barriers limiting their access to and use of the mobile-enabled products and services.
- Explore the attitudinal and social barriers, such as stigma and discrimination, faced by persons with disabilities in addition to the physical or technological barriers.
- Consult, involve and listen to persons with disabilities in the development and iteration of products and services, in line with the mantra “nothing about us without us”.
- Consult with those who understand the experiences, requirements and barriers of persons with disabilities in the market (e.g. Disabled Peoples’ Organisations (DPOs), relevant customer facing employees).
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Fleet Manager

Registered Mail

FRAGILE
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National Addressing System

- Increased revenue to Government through tax collection
- Effective response to emergency situations by Fire, Police and ambulance services
- Provision of verifiable proof of residence
- Effective identification and control of disease outbreaks
Broadcasting services
Broadcasting services

- Receiver Subsidies
- Decoder Subsidies
- Grants for content development
"None of us, including me, ever do great things. But we can all do small things, with great love, and together we can do something wonderful”

Mother Teresa
Zikomo