PART TWO

USAF Strategy
2021-2024

February 2021

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PART 2

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1.   INTRODUCTION

One of the core long term strategic objectives for ESCCOM and specifically the Universal Access and Service Fund ("the Fund" or "UASF") is to fulfil and achieve universal access and service to high speed, high capacity, high quality, highly reliable and affordable broadband Internet throughout Eswatini. To that end, this Eswatini Universal Access and Service Fund Strategy ("Fund Strategy" or "the Strategy") takes off from where the 2018 – 2021 Strategy ends and covers a second three-year period (2021 – 2024). It covers broadband, postal and broadcasting services and includes the following components:

a) The strategic objectives for the UASF during the life cycle of this strategy
b) The three-year programme for the implementation of the Strategy 2021-2024, including a set of key interventions.
c) The action plan and budget for the three-year programme.

As background and context, it is important to recall that the Fund is a specific intervention and there are other regulatory measures in place, undertaken by ESSCOM, to achieve broader universal access and service goals. Outside of the Fund, ESCCOM can take steps to (i) facilitate increased competition in the ICT sector and create an environment where market forces push operators to compete on price and quality in order to close the access gaps, and (ii) develop business models for connectivity and to increase uptake and usage between the sustainability frontier and the universal access and service frontier.

To achieve this, ESCCOM will need to continue to focus on a few key initiatives, including ensuring universal access to telecoms, broadcasting and postal services; issuing and harmonising existing and new licences, especially in the areas of postal and broadcasting where new legislation has been passed; forming strategic partnerships; levelling the competitive playing field; strengthening the regulation of commercial broadband infrastructure and facilitating cost based access to it; partially funding the UASF, and developing mechanisms to ensure transparency of its regulatory endeavours. Notwithstanding these regulatory measures, this strategy focusses on the steps that the Fund must take to implement its strategy.

2.   MISSION

To increase access to broadband, broadcasting and postal services therefore enhancing the socio-economic positioning of the citizens of Eswatini.

3.   VISION

To administer the Universal Access and Service Fund and facilitate the design and implementation of sustainable projects that deliver high quality and universally accessible, affordable digital and ICT services.

4.   VALUES

Accountability, Innovation, Integrity, Collaboration, Transparency.

5.   FUND SWOT

STRENGTHS

- Policy and Regulatory environment
- Autonomy in decision making
- Fund governance
- Sound and Supportive Committee
- Collaboration and relationships with public sector partners
- Ability to disburse funds
- Implementation of health and education projects

WEAKNESSES

- Limited visibility and understanding of UASF
- Lack of industry participation in bidding processes and projects
- Fund Contribution under-collection
- Reliance on Commission for subsidy
- Not all sources of funding have been explored
- Not all programmes implemented
- Lack of capacity building and training to increase project impact
- Constraints on changing regulations, if required

SWOT

OPPORTUNITIES

- Digitisation and 4IR
- Policy and Regulations on Affordability
- Citizenry Education on ICT sector and Fund
- Mandate aligned to Government National Development Plan
- Partnerships with donor organisations – expand sources of funding
- Expanding scope to include postal and broadcasting
- Increase size of fund – higher levy, more contributors, more sources
- Impact of COVID-19 and lockdowns

THREATS

- Skills gap – lack of knowledge of use of ICTs
- Government coordination on implementation of projects - silo approach
- Under-collection of contributions
- Cost overruns and increase in sunk costs
- Sustainability of UASF Funded projects
- Impact of COVID-19 and lockdowns

6.   PESTLE

Political	Aligned national policies and development plans
	Political alignment on the role of ICT in growth and
Economic	Economic stability is good for investment and growth
	Impact of COVID
	High unemployment
	Young population
	High cost of communication
Social	Online protection of children
	High usage of Social Media
	Low ICT skills and uptake
	Gender discrimination
	Rural and Urban divide
	Increased use of digital/ virtual/remote (education, work, etc)
Technological	Rapid technological changes – 4IR
	Spectrum opportunities - 4G, 5G
	Up to date equipment
	Privacy and Data regulations
	Research and Development investment
Legal	Strong Legal and Regulatory Framework
	Lengthy process for amendments of law/regulations if required to update (e.g. definitions)
	Legal skills to deal with cyber-crimes and cyber security
Environmental	Environmental impact assessment
	Management of e-waste
	Geographic topography determines ICT solutions
	Trends towards Green ICT as a means to support environment

7.   STRATEGIC OBJECTIVES

Medium term (three-year) strategic objective (2021 – 2024): To build upon the foundation framework that was established between 2018 and 2021, and that is essential to achieving the long-term goal of universal access and service for broadband Internet, broadcasting and postal services in Eswatini's four regions. This includes pursuing UAS for individuals, households, SMME's, schools and health facilities.

Long term goals (2024 – 2027): To achieve universal access and service to high speed, high capacity, high quality, highly reliable and affordable broadband Internet for telecoms, broadcast and postal services throughout Eswatini by 2025.

8. STRATEGIC PILLARS

These strategic areas form the five pillars that support the realisation of the strategy as follows:

Pillar	Description	Objective/ Specification
Subsidization	To use the Fund to create key interventions to address the market access gap	• Funding to address market access gap, with an Operating Manual to support expenditure. • No ongoing subsidisation of end user subscriptions or usage
Availability	All inhabitants have service available	• Consistency in coverage of inhabited geographic territory • Region /area / Tinkhundla
Accessibility	All inhabitants can access the service	• Gender, Ethnicity, Religion, Language • Persons with Disabilities are able to use the services available. • Relevance of content to accommodate marginalised groups
Ability	All inhabitants have the basic ability/ capacity to use ICT services	• Awareness of services and their benefits • Ability to use computers and devices. • Ability to navigate the Internet & use ICT services. • Gap between the ownership of data-capable mobile phones and the awareness and ability to take full advantage of Internet information and services, and to do so safely and protected
Affordability	All inhabitants can afford to use the service	• Basic services must be affordable to all citizens regardless of economic bracket. • No one must be disadvantaged by income; services should not cost more than 2% of average household income.[1] • No cost variations due to geographic location, urban or rural factor
Evidence Based Decision Making	All decisions made by the Fund are based on sound research and investigation	• The strategy, its programmes and budget are evidence based. • Information is provided in a transparent manner • Information will be sourced when the annual plan is formulated to inform the programs.

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[1] This is in line with global best practice, as per amongst others A4IA. See Appraisal Report.

9. GOALS

In the normal course ESSCOM, as the sector regulator seeks to promote that licensed operators increase the level of ICT service in households through their maintenance of existing infrastructure, deployment of new infrastructure and provision of services at affordable rates. These measures are key to maintaining current access and filling the market access gap. The Fund plays a key and complementary role to the regulator in addressing the (true) access gap, i.e. the portion of the market that even under an ideal legal and regulatory environment would not be covered by operators due to its high cost or low-income level. To that end, the Fund's core strategic objectives are based on increasing access to ICTs in Eswatini, with a key focus on broadband development. This implies the following goals:

- To increase the level of ICT access in identified facilities and institutions, namely health facilities, education facilities and other public sector facilities and institutions.
- To increase the accessibility, affordability and availability of ICTs for identified communities in Eswatini, including Persons with Disabilities, the elderly and students.
- To increase the ability of all people in Eswatini to use ICT services.

10. GUIDING LESSONS LEARNED FROM INITIAL 2018 - 2021 STRATEGY

Part 1 of this study is an Appraisal Report which assesses the successes and failures of the Fund during the period 2018 - 2021. The Appraisal Report considers the programmes, projects and steps taken to build the Fund institutionally. It identifies the following lessons learned from the implementation of the previous strategy:

- Effective budgeting forms an important foundation. The estimated amount spent on each programme should be predefined and adjusted to the desired impact of the programme in the overall strategy;
- The participation of licensees is critical to the successful rollout of the strategy – in order to effectively implement subsidies, the Fund's programmes need to be designed bearing in mind the incentives for collaboration with licensees, equipment suppliers, NGOs, educational institutions and any other complementary institutions. If not, the Fund risks increasing its costs, and reducing its impact, by fully funding fewer projects than anticipating (at a higher cost to the Fund);
- The complementary relationship between the Fund's programmes and regulatory reforms measures implemented by ESCCOM, such as the Price Transformation Strategy (affordability), or the assignment of spectrum (availability) should be borne in mind at all times to ensure optimal use of the Fund – this has been successfully done in Eswatini;
- The annual review of the implementation of the Strategy is important. The strategy is treated as a living and agile document and effective monitoring and evaluation is key to ensuring that programmes and projects are relevant and impactful.
- Stakeholders have commented on the need to strengthen the identity of the Universal Service Committee and the Fund. This may need to be developed within the umbrella of ESSCOM, to enable an understanding of the Fund's particular mandate and its programmes and projects. It is also a key factor in enabling stakeholders to have an appreciation of the work done and gains made by the Fund.

11. BENCHMARKING OVERVIEW

11.1 Regional approaches – benchmarking Fund Management Approaches

Most countries in the region have a Fund established on similar premises as the UASF in Eswatini. In terms of institutional framework, within the SADC region, in similar sized countries the tendency is to have the Fund situated within the regulator, rather than stand alone as in the case in larger economies like Ghana, South Africa Nigeria. Levies range from 0.2% (South Africa) to 4% (Niger). More than half the funds studied by GSMA (12 out of 23) apply levies of 2% or more of operator revenues. Other than levies, sources of funds vary but tend to include:

- Monies provided by Parliament.
- Investment made by the Trustees of the Fund/ Board of the regulatory authority Donations, grants and gifts

Figure 1: Benchmark Overview - Botswana, Lesotho and Zambia
Sources: LCA: https://www.lca.org.ls/?s=USF,
ZICTA: https://www.zicta.zm/storage/posts/attachments/jzDdmDTQr5cWOnQgpx4LaZwaMVzQWYfdMmxO3lcp.pdf ,

	BOTSWANA	LESOTHO	ZAMBIA
FUND LOGO AND WEBSITE	http://www.uasf.org.bw/		
BUDGET	Total levies from operators amounted to BWP 50,308,222 = **E 69,042,929** (2020) The Regulator contributed BWP 21,285,027 = **E 29,211,539** from its surplus revenue for the year under review. (2020)	Fund Contribution : M26m (2019)	Universal Access Contributions: K69m = **E47m** and K5.5m = **E3.75m** from Other Income (2019
STRATEGIC PERIOD	3 Years	3 Years	Not Specified
CONTRIBUTION	• 1% of Gross Revenue • Received from licensed Telecommunications Service Providers, Commercial Radio Broadcasters, Commercial Television Broadcasters, and the Public Postal Operator	• 1% of annual Net Operating Income, the Act provides for a levy of up to 2% of the licensed telecommunications operators' net operating income	• A rate not exceeding 1.5 percent of the licensed telecommunications operators' gross annual turnover
OTHER PERMITTED SOURCES OF CONTRIBUTION	• Government contributions as may be appropriated by the National Assembly from the Budget; • Grants and donations received for universal access and service projects; • Any surplus income of the Authority; and • Investment income from accumulated funds.	• The Government, pursuant to an appropriation made by the Parliament or in any other lawful manner; • The revenue from the Authority composed of: a) An initial seed capital of M10 million b) An annual contribution of not less than 25 percent of its annual surplus • Grants from donor agencies	• The Fund may receive moneys from appropriations from Parliament, grants, donations and other sources

	BOTSWANA BOCRA	LESOTHO LESOTHO COMMUNICATIONS AUTHORITY	ZAMBIA ZICTA
ADMINISTRATIVE SET-UP	The fund is overseen by an independent UASF Board of Trustees, BOCRA serves as the Secretariat to the UASF	The USF shall be administered by the Executive Secretary. The functions of the ES are as follows: i.e Executes the decisions of the Committee; ii. Transacts the day-to-day business of the Fund; iii. Organizes and provides secretarial work to all meetings of the Committee; iv. Exercises such powers as directed by the Committee; and v. Performs the secretarial functions of the Fund.	Act No. 15 of 2009: administration and management of Fund: The Fund shall be managed and administered by a Fund Manager appointed by the Authority. The Fund Manager shall each year publish details of the activities of the Fund within three months of the end of the financial year of the Authority.
PROGRAMMES	• Public Wi-fi Hotspots • Development of 3G and 4G Network coverage in rural villages • Computerisation and internet connectivity to rural schools • Closing of telecommunications network gaps along the Trans Kalahari highway	• Supporting Lesotho Internet Exchange Point • Promoting digital literacy in schools • Funding of Communications Infrastructure projects	• Rural connectivity , Road accessibility • Renewable energy / solar projects • Rural electrification, Payphone rollouts
LEGISLATION AND REGULATION	• Communications Regulatory Authority Act No. 19 of 2012 (CRA Act): • Section 5 (1) (b) of CRA gives BOCRA Board administrative responsibility to promote and ensure universal access • Section 5 (1) (c), of CRA allows for the Board to impose a Universal Access and Service (UAS) levy on identified operators for purposes of funding universal access in the communications sector.	• The Fund operates under the Communications Policy 2008. • The policy objectives for universal access to voice telephony, internet access, broadcasting and postal services are also well articulated in the Act. In addition to the 2008 policy, the Government has endorsed targets as part of the SADC and in for SDGs. Therefore, there is a need to assist the Government to meet these targets which are all meant to improve the quality of life for all citizens.	• The Telecommunications Act of 1994 addressed the concept of universal access to telecommunications services by mandating the Communications Authority to take all reasonable steps to extend the provision of telecommunications services throughout all rural and urban areas of Zambia, including emergency service, public call box services, and directory information services. • no secondary legislation was enacted to support management and administration of the Fund.

11.2 European Approaches – benchmarking funding strategies, projects and approaches (not Funds per se)

This is not a 'like for like' benchmark given market sizes, terrains, and economic and market development; however the funding approaches and subsidisation model are instructive and provide lessons for ESCCOM. Most countries have broadband plans or programmes which include funding approaches for addressing rural and remote areas. The Broadband Plan or Strategy, or Digital Strategy sets the framework for the funding approach. The priority tends to be ensure the roll out of high speed networks in rural and remote areas through partnerships between government and the private sector using varying subsidization models.

The table below is outlines the **Potential Global Partners**. Local due diligence of potential partners will be conducted, however, some global partnership opportunities can be pursued.

BROADBAND FUNDING STRAEGIES, APPROACHES AND PROJECTS			
	FRANCE	**FINLAND**	**UNITED KINGDOM**
General approach to urban and medium density areas	Market driven approach to broadband roll out. Competition between operators who can invest at good returns on capital, facilitating good connectivity for consumers.	Market driven approach to broadband roll out. Competition between operators who can invest at good returns on capital, facilitating good connectivity for consumers.	Market driven approach to broadband roll out. Competition between operators who can invest at good returns on capital, facilitating good connectivity for consumers.
Rural Areas Approach	Launched in 2013, the Plan France Très Haut Débit (Broadband Programme) was set up by the state to support the funding of high-speed broadband connections in rural markets that would not be financially viable for commercial operators. The hybrid approach (private/public) is supports is overseen by ARCEP (regulator)	Broadband support schemes are available, such as the rural programme, which offers financial support for municipalities, cooperatives and SMEs in rural areas for the construction of broadband networks, with the support covering 50 - 70 per cent of the total costs.	Government supports investment in fast broadband provision to rural areas. Treasury pledged £5 billion in March 2020 Budget to fund "gigabit networks" in the 20% of the country most difficult to reach.
Specifics of Broadband Programme	• PPP/concession structures applied to broadband projects in regions where (1) there is a sole operator and further network capacity is required, or (2) where there are no incumbent operators and no provision • In these scenarios network operators and public authorities both contribute to the funding of new network infrastructure, with the local authorities drawing down finance from the Plan France Très Haut Débit. • The first projects launched were awarded large public subsidies, but more recent projects were financed with very limited to no public subsidies. • Upon completion, the private sector service provider is granted a concession to run the network for 25 to 30 years in return for contributing to the upfront investment in the network. • This model has seen existing operators focus on their urban networks, and opened up space for new players with PPP portfolios to establish their franchises in rural and semi-rural parts of the country.	• The 2010 Broadband Programme scheme (the application period of which has expired but is expected to renew and continue in similar form as of 2021) • Support is open to all applicants through public tenders and sees the government covering 33%, 44% or 58% of the eligible costs depending on the municipality's financial status, with the relevant municipality offering from 8 to 33 % and the private sector applicant putting up a minimum of 34%. • In return for this state support, private partners have to commit to offering network and communications services for at least ten years and allow other operators to access the funded network on reasonable terms. • Applicants are screened pre-project with respect to the scope and pricing of services they plan to offer, as well as their financial status and risk analysis of the operations and finances of the proposed project.	• Broadband funding is deployed via Building Digital UK (BDUK), a part of the Department for Digital, Culture, Media and Sport (DCMS). • BDUK runs voucher schemes that contribute to the costs incurred by small businesses and communities when installing high-speed broadband in rural areas. Qualifying premises can receive vouchers of up to £3,500 for SMEs and £1,500 for residences. • BDUK is also in the process of outlining a framework for investing directly to connect public sector sites in hard to reach areas to highspeed broadband. This connectivity can then be leveraged by commercial players to reach other properties nearby. • BDUK is also looking at putting out contracts to tender to deploy fast broadband in areas where the market has not done so.

12.   FOUNDATION FRAMEWORK

This section of the strategy outlines the elements of the broader legal, regulatory and social framework that are necessary to enable the Fund to succeed in achieving its objectives in the next strategy period.

12.1   Market Liberalisation: Telecoms, broadcast and postal services:

Notwithstanding the Fund interventions, ESCCOM will continue to regulate the ICT sector in the public interest through the development an enforcement of regulations and license conditions which support competition and its associated benefits, i.e. lower prices, better quality and more choice for consumers. These associated benefits are aligned with the desired outcomes of the Fund Strategy. They will in turn positively impact on Eswatini's ability to meet broader national and sectoral UAS targets and specifically increase availability, accessibility, affordability and awareness of telecoms, broadcasting and postal services.

12.2   Developing a Fund Identity

The initial strategy explicitly stated that the Fund would use ESSCOM's identity. In this next phase of its existence, the Fund will develop from the previous approach of using the ESCCOM identity, to developing and using its own identity to make it and it's work more visible to the public and to key stakeholders. This is important for the Fund to be transparent and accountable and to enable it to better establish partnerships, implement projects and gain recognition for the work it does. This will in turn lead to increased credibility.

12.3   Building Strategic Partnerships that Support the Fund

The Fund will place a new focus on building strategic partnerships to promote universal access. These partnerships will support the implementation of the Fund's programmes across the country, working within its mandate. Achieving this involves:

a) Engaging with the Office of the Prime Minister; the Ministry of ICT; the Ministries of Finance, Education and Health; the RSTP, industry and other stakeholders,
b) Positioning the Fund as the facilitator of subsidised universal access and service programmes and projects outlined in the UAS strategy that are necessary for Eswatini to meet its national and regional ICT sector targets

12.4   Collecting Sufficient Funds to Implement the Strategy

It is imperative that the Fund collects sufficient funds to properly implement the programmes that are set out in this strategy. The UASF will focus on ensuring that there is transparent and accountable management of the monies in the Fund, and clarity and fairness in terms of disbursement. It will

additionally ensure that the accounting records are well maintained and publicly available. Amongst the approaches to ensuring that there is sufficient funding, the Fund will:

- Increase the universal access levy from 0,5% to 1% of net operating income in line with international best practice and to meet the needs of the UASF;
- Utilise all of the sources of funding described in legislation; and
- Ensure that it is the recipient of diverse and sustainable sources of funding, thus limiting overreliance on any single party for financial support

13.   FUND PROGRAMMES

The UAS programme defines the types of activities that the Universal Access and Service Fund will fund over the three-year period based. The budget estimates that about E87 million will be spent on projects across the five programmes. The budget is slightly above the projected income of E86 million received from levies during the strategic period, this will however be circumvented by the income from the financial year 2020/2021.

The forecast estimates used in this strategy are based on a levy of 0,5% in the financial year of 2021/22, thereafter an increased levy at 0,25% increments upto 1% in year 2023/2024; adjusted for inflation of 4%. The forecast also takes into account a balance brought forward from the financial year 2020/2021 as the levies for that financial year will only be paid in the 2021/22 financial year. AS such the forecast below reflects a balance of only the strategic period, excluding the balance brought forward.

FORECAST					
Revenue, E'000	2020-2021	2021-2022	2022-2023	2023-2024	Assumptions
					An increment of 0,25% will be applied from Year 2 of the Strategy. This will lead to a 1% contribution by the third year of the Strategy.
MTN Net Operating revenue	E1 044 348	E1 091 514	E1 135 175	E1 180 582	
Growth	9%	7%	4%	4%	MTN NOR growth slows down to inflation in 2 years' time
MTN UASF Contribution	E5 222	E5 458	E8 514	E11 806	
EPTC Net Operating Revenue	E419 043	E435 805	453 237	471 366	
Growth	-6,4%	4%	4%	4%	Given recent decline, EPTC NOR grows at inflation

EPTC UASF Contribution	E2 095	E2 179	E3 399	E4 714	
ESCCOM	E15 000	E15 000	E15 000	E15 000	ESCCOM contribution settles at E15 million
ISP UASF Fees	E244	E254	E396	E549	
ISP UASF Fees Growth	11%	4%	56%	39%	ISP grew at inflation but this recovers to 2% above inflation
Eswatini Mobile Net Operating Revenue	E121 404	E126 260	E131 311	E136 563	
Eswatini Mobile UASF Fees	E607	E631	E985	E1 366	
Eswatini Mobile UASF Fees Growth	74%	4%	56%	39%	ESM market share growth continues to grow, then slows down
Interest received	E258	E236	E326	E335	Interest income remains at approx. 1% of UASF revenue
Total UASF Revenue E'000	E23 426	E23 758	E28 620	E33 768	**E 86 146**

All of the programmes should support the digital value chain set out below. They should support either the access, availability and accessibility of user interfaces (devices and equipment), connectivity, enabling technology and services or online services and broadcasting content, mor a combination thereof.
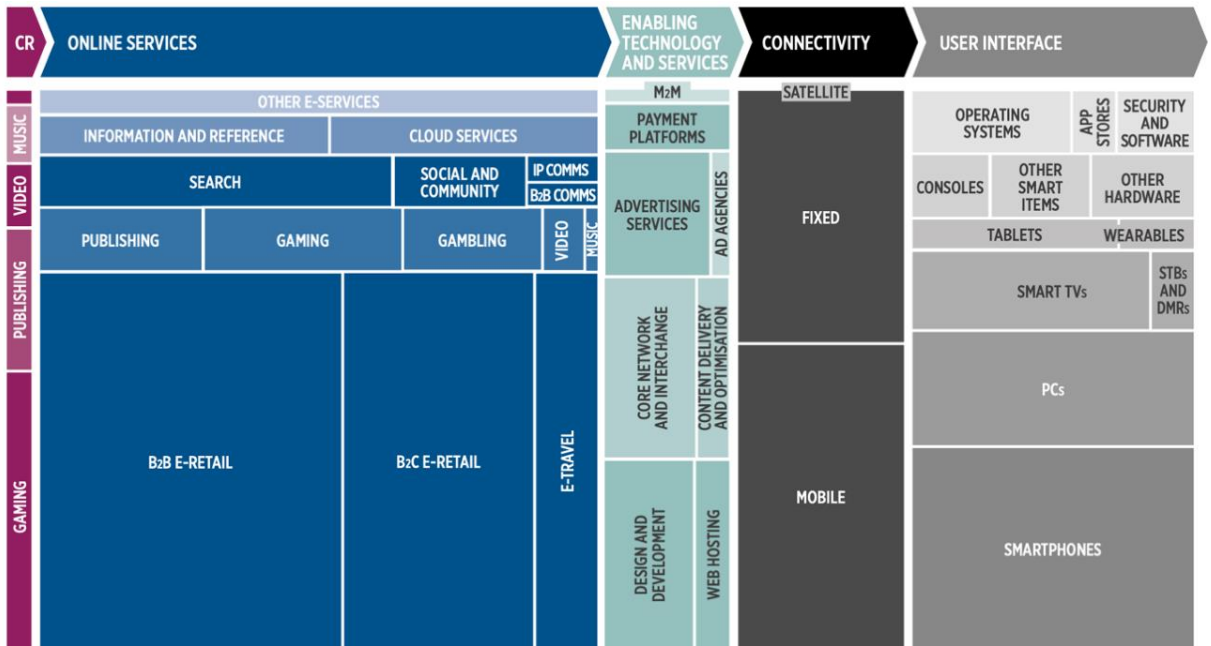
Source: GSMA

All projects that are funded must fall within a programme and should advance the objectives and goals of the relevant programme. The Fund will use the Fund Manual to inform the manner in which beneficiaries are selected and will not undertake projects that do not fit in with one of the approved programmes. Five programmes are set out below:

Programme	Description
Programme 1: Connectivity and User Interface (Demand Side Measures)	• To facilitate last-mile broadband connectivity using the most efficient last mile technologies with broadband access of 3Mbps (downlink) for mobile broadband and 4Mbps (downlink) for fixed broadband for public institutions, with a focus on health facilities and schools • To facilitate affordable services and equipment / devices for identified institutions, community centres/public internet cafes and end-user communities • To facilitate access to broadcasting and postal services through innovative mechanisms
Programme 2: Fund Management	• To support Fund staff and the USC to perform their duties in relation to managing the Fund programmes and budget and the related monitoring and evaluation activities • To develop the Fund identity including through national promotional campaigns, documentation and public relation programmes aimed to make projects that promote increased access to ICTs more visible • Note: The administration of the UASF and USC will be funded directly by ESCCOM rather than by the Fund.
Programme 3: Network Infrastructure Enhancement and Broadband Connectivity (Supply side measures)	• To strengthen connectivity through fixed and mobile network infrastructure based on a technology-neutral approach • To increase universal access and service (measured by population and geographic coverage) and to improve network reliability and redundancy.
Programme 4: Digitisation, Enabling Technologies and Services (Usage and Uptake)	• To support accessible local content with 4 focus areas: (1) supporting e-government through the digitizing and sharing of government content; (2) facilitating user generated content (3) broadcasting content that can also be streamed online; and (4) the establishment of Eswatini Digital Access Centers. • To support platform and application development
Programme 5: Digital Literacy and ICT Impact Training	• To provide capacity building and training to support the use of ICTs by all end users across sectors and economic segments (i.e. SMMEs, households, schools etc) • To ensure that all programmes that are rolled out by the Fund (Programmes 1 - 4) include an appropriate element of capacity building and training to ensure sustainability and maximum impact

All projects that are funded must fall within a programme and should advance the objectives and goals of the relevant programme. The Fund Manual to inform the manner in which beneficiaries are selected and will not undertake projects that do not fit in with one of the approved programmes:

13.1 Programme 1: Connectivity and User Interface

13.1.1 Objectives

The objective of this programme is to facilitate broadband connectivity for public institutions, with a focus on health facilities and schools, using the most efficient last mile technologies. At another level, it is to facilitate affordable services and equipment / devices for identified institutions, community centres/public internet cafes and end-user communities.

Additionally, as the postal and broadcasting regulator frameworks are developed, this programme will seek to encourage access to broadcasting and postal services through innovative mechanisms to increase access points such as community broadcasting and mobile postal services.

13.1.2 Beneficiaries

Intended beneficiaries of the connectivity aspect of this programme include schools, health facilities and other identified public institutions.

Beneficiaries of affordable, subsidised services, equipment and devices may include:

- End user communities, such as persons with disabilities, the elderly, students, and people with low income, amongst others.
- Schools, health facilities and other identified public institutions
- Postal service licensees and broadcasting licensees may also be beneficiaries of this programmes once the frameworks for same are finalised, assuming this is done during the period of this strategy.
- Potentially mobile operators and ISPs providing e-rate and lifeline services to designated consumers, subject to finalisation and implementation of the regulatory frameworks for same.

13.1.3 Goals

The goals of this programme are:

1. To facilitate connectivity for schools and health facilities that are currently not connected to the network; and to upgrade to broadband and improve the connectivity already existing for health facilities, schools and other public institutions;
2. To provide subsidies to facilitate affordable services, equipment and devices for identified institutions and end-user communities
3. To complement and support the implementation of the e-rate which is already provided for in the UAS Regulations and applicable to all schools, health facilities and other government facilities that require connectivity.
4. To encourage access to broadcasting and postal services at local land community levels

The above goals and objectives should take into consideration the use of the most cost effective and high-quality last mile technologies for broadband access with a minimum 3Mbps (downlink) for mobile broadband and 4Mbps (downlink) for fixed broadband; and a minimum download speed of 10 Mbps per site.

They should also take into account the level of development of the postal and broadcasting regulatory frameworks, and the framework for universal access to the sub-sectors.

13.1.4   Description

a) The UASF and the key Ministries for health, education and other identified public sector services such as agriculture should collectively negotiate a long-term cost-based, wholesale competitive price contract for connectivity with operators including SPTC, Eswatini Mobile, MTN and other existing ISP operators, as well as qualified public sector providers of capacity such as Eswatini Electricity Company (SEC). Despite the challenges associated with getting operator buy-in for this approach in the first phase of the strategy it is maintained that a least cost bid is an effective means to provide subsidies and a least cost bid may be issued by the Fund to objectively and transparently determine the provider of connectivity.

b) The UAS Fund programme will fund selected institutions and facilities in co-ordination with the Ministries of ICT, Health and Education and Ministries responsible for identified other government services (incl. agriculture) to increase and improve broadband connectivity through a limited subsidy. This limited subsidy will include provision for:

- computer equipment and other end user devices
- last mile connectivity equipment
- monthly connectivity charges and
- a limited Opex budget over three years
- training and capacity building, funded under Programme 5

c) The Fund may provide subsidies to operators and ISPs for the provision of e-rate and 'lifeline' subsidies, once the related regulatory frameworks finalised and implemented.

The UAS Programme will specify the number of schools, health and other government facilities that can be covered during this time of the strategy for a period of three years, reviewable on an annual basis. It will also in partnership with other government departments and partner NGOs identify of the projects that are eligible on an annual basis.

With respect to the provision of subsidies to facilitate affordable access services, devices and equipment, the UAS Programme will focus on students, persons with disabilities and low income /unemployed users. The UASF may develop more specific criteria for determining eligibility for this category of funding.

13.2   Programme 2: Fund Management

13.2.1 Objectives

In line with legislation, the Fund will cover the costs of management of the funding programmes out of the funds provided to the Fund by operators. It will manage the Strategy and the associated budget and will be responsible for the related monitoring and evaluation activities, which will take place every year.

The administration of the Fund and USC, including legal and financial administration, will be funded directly by ESCCOM rather than by the UASF.

13.2.2 Beneficiaries

The beneficiaries of this programme, which supports a key element of the Eswatini UAS institutional framework, are the Fund, the USC and the beneficiaries of Programmes 1, 3, 4 and 5 of the Strategy.

13.2.3 Goals

The Programme 2 goals are as follows:

- To ensure that the institutional framework is in place to effectively manage the Fund and its programmes;
- To ensure that the Fund is professional and successful in implementing its tasks. This core organisation includes a Director for the Programme, a part time engineer (a shared resource with ESSCOM), part time legal advisor (a shared resource with ESSCOM), a part time Finance Manager (a shared resource with ESSCOM) and an administrative assistant/ project manager.;
- To cover the cost of hiring competent and highly motivated professionals to run the Fund;
- To develop the Fund's identity, including branding, communication strategy, the fund national promotional campaigns, documentation and public relation programmes. The aim is to make the projects that promote increased access to ICTs more visible;
- To facilitate that ESCCOM provides resources to cover the additional costs for of the UASF, including all legal and administrative costs.

13.2.4 Description
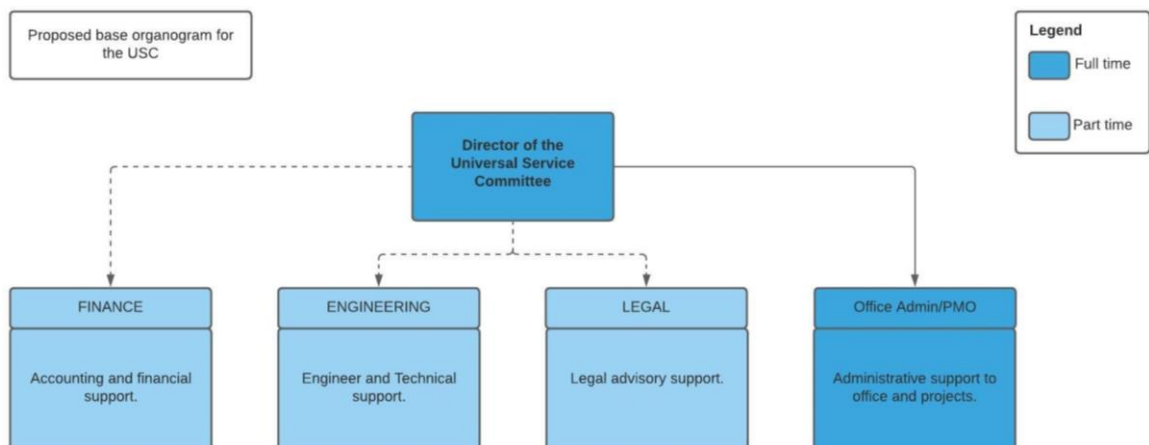
a) The Director is responsible for the day-to-day management of the UASF and the implementation of this Strategy. The Director manages and oversees the successful execution of the strategic programme and promotes universal access throughout the country. This full-time position is paid directly from the UAS Fund.

b) Three additional professional support staff are engaged on a part time basis, ideally already from the existing staff at ESCCOM as has been done under the previous strategy. The shared resources include:

    i. a network engineer,
    ii. a legal advisor; and
    iii. a finance manager

An office administrator/ project manager will be brought on board to support the office as well as the projects. Ideally this person can take responsibility for both office administration and basic project management to support the Director as a dedicated resource.

c) ESCCOM is also directly responsible for the following operational expenses of the Fund through its own existing resources (not funds collected from operators via levies of from other sources of funding):

- Cost of the office space at ESCCOM headquarters, office computer equipment facilities, connectivity and other office expenses.
- Legal and administrative costs of the Fund
- Marketing and public relations
- Other costs of the UASF that are not within the budget allocated from the UAS Fund, as may be agreed from time to time.

It should be noted that in terms of the UAS regulations, ESCCOM is also a designated source of funding.

13.3 Programme 3: Network Infrastructure Enhancement and Broadband Connectivity

13.3.1 Objective

This programme aims to enhance and augment existing network infrastructure on a technology-neutral basis. The ultimate objective of this programme is to increase access and service and improve network reliability and redundancy.

13.3.2 Beneficiaries

The beneficiaries of subsidies awarded under Programme 3 are intended to be providers of network services and infrastructure. However, this may not be the case where the Fund is required to rollout infrastructure itself, as was the case under the 2018 – 2022 strategy.

13.3.3 Goals

The programme goals are:

- To use baseline data from the ESCCOM technical team about commercial coverage to increase population and geographic coverage through subsidisation of network extension
- To increase coverage through the subsidisation of the optimisation or enhancement of existing networks

13.3.4 Description

a) UASF as an additional supporting regulatory measure, ESCCOM will regularise the licensing of any past, present or future network infrastructure operators, whether private or government, the have built any infrastructure. ESCCOM should maintain a full audit of these assets through GIS maps and other information. In addition, ESSCOM will put in place the appropriate licensing and regulatory frameworks for postal and broadcasting networks.

b) The construction of infrastructure may be outsourced to the private sector under competitive bidding procedures in line with the legislation and procurement procedures applicable in Eswatini for the implementation of disbursement of monies from the UASF.

c) Existing BTS will be upgraded and BTS capacity will be increased. The geographic focus for the next three years of the strategy for this programme will continue to prioritize Shiselweni and Lubombo regions given that., as they remain particularly underserved.

d) Network infrastructure (supply-side) enhancement project financed by the Fund will require, in addition to the actual network infrastructure to be deployed, inclusion of broadband connectivity to basic facilities (demand-side) such as schools, health facilities or other identified government facilities. This additional connectivity will be funded by the UASF, along with the infrastructure project. The Fund will cover Opex over the first three years. The number of facilities will vary with each project but it is budgeted for up to three basic facilities. The operator that bids for an infrastructure project to be funded by the UAS Fund will include in its business plan (i) the cost for the network infrastructure – whether OFN, wireless, a BTS or other, (ii) the cost of last mile connectivity to the basic facility, and (iii) the cost of OPEX for these basic facilities for a period of three years;

e) Any ad-hoc requests for funding from the UAS Fund from any operator will be accepted but will be subjected to open competitive bidding based on the principle of the least subsidy allocation model, utilizing the basic transparency model for Public Private Partnerships (PPPs);

f) The least cost subsidy model implies that the UAS Fund will not fund 100% of the project but only the portion of the project that makes the project cost recoverable and sustainable to the operator. The bidder that requires the least amount of subsidy, based on similar technical parameters for implementation, will be awarded the project, being subject to the Eswatini procurement rules that are applicable.

    a) Each infrastructure enhancement project will have a number of minimum of specific technical parameters to be fulfilled or exceeded by the bidder operator to ensure quality of service;

    b) There should be at least two bidder operators per project and the bidder selected is the one who will request the least subsidy from the UAS Fund in order to implement that project. Where there is insufficient participation by industry, the Commission will endeavour to fill the identified gap.

    c) Each project will be subject to a monitoring and evaluation (M&E) plan to be conducted by the USC annually.

    d) Each one of these projects, whether initiated from an operator request, or originated by the ESCCOM/USC, will have a series of targets in terms of time of construction for the site, time of construction and/or refurbishment of the basic facility, as well as penalties for not fulfilling the contractual obligations on time. These targets will be specified during the bidding process and can be improved in the bidding process by the operators bidding.

13.4 Programme 4: Digitisation, Enabling Technologies and Services (Uptake and Usage)

13.4.1 Objective

To support the creation of accessible local content with 4 focus areas: (1) supporting digitising and sharing government content; (2) facilitating user generated content (3) broadcasting content that can also be streamed online; and (4) creating accessible local digital access centers within communities.

The programme will be undertaken bearing in mind the following "online services" and "enabling technology and services" portions of the digital value chain.

13.4.2 Beneficiaries

Programme 4 is intended to provide subsidies to (1) SMMEs, IT and ICT providers supporting government departments and Ministries to support already existing projects; (2) developers and SMMEs interested in application and content development; and (3) players in the broadcasting and online streaming value chains (especially SMMEs and community based projects); and (4) SMMEs interested in the establishment of a digital access center for local communities.

13.4.3 Goals

The goals of this programme are:

- To encourage the development of local digital content to, in turn, increase the usage and uptake of broadband access
- Increase the availability, accessibility and adoption of services by individual and business end users
- Grow the broadcasting industry and the associated value chain and encourage the delivery of content across digital platforms

13.4.4 Description

a) Supporting e-government:

This area will have two parts, support in terms of (1) supporting the digitization and archiving of government information – mainly with technical expertise and resourcing; and (2) supporting the facilitation of the development of online portals, including payment portals in collaboration with financial sector partners.

The digital administration of public services and payments facilitates various benefits for both governments and users. For the Government this programme and the associated projects will facilitate and support the implementation of the e-government strategy and therefore an efficient, consolidated mechanism to improve government revenue and citizen satisfaction. It will also reduce silos and facilitate a coordinated whole-of-government model that streamlines interdepartmental services as indicated as a weakness in the Appraisal Report, the online payment functionality enables the immediate availability of funds for government authorities, reducing time lags from financial intermediaries.

Projects may include

- Supporting the establishment of a public information portals and payment portals for government departments
- Providing technical and consumer awareness support for the digitisation and archiving of government information
- Supporting SMMEs to develop platforms and applications to facilitate e-government, with a focus on government to citizen communication, and institutions in the health and education sectors

b) User generated content

User-generated content (UGC) refers to media and creative works such as text, images, audio clips, videos etc, created by Internet users. This programme seeks to facilitate access to same.

With 350,000 social media users in Eswatini in January 2021 (about 30% of the population), there is significant potential for this channel to increase usage, especially if there is relevant local content. Social media users make up about 60% of all internet users. This is important as on social media, most content is user generated – hence the increase in uptake which was as most as 35% between 2020 and 2021.

As such, projects geared at developing more end user content will drive people online. Projects may include:

- Supporting application developers to enable sharing of user-generated content in their own locally developed applications.
- Entering into partnership to support the setting up incubation centres and ICT innovation hubs. Potential partners who should play a lead role in such projects include private sector, RSTP and universities and technical colleges

c) Broadcasting content

This programme will support online broadcasting content through projects across all levels of the digital value chain.

This programme will be implemented across the four regions: Hhohho, Lubombo, Manzini and Shiselweni. This will facilitate monitoring and evaluation as well as cross-learning between the different projects.

d) Digital Access Centers (ICT Hub's)

This programme is designed to promote true accessibility within local communities through the establishment of an Eswatini Digital Access Center (EDAC). The EDAC is will not only promote digital access for local communities but will also encourage local SMMEs to participate in building a knowledge and digital economy through the operation of the EDACs. The UASF will support the SMMEs with capex to establish the centers, as well as operational support. These centers will facilitate the uptake and use of digital services, working towards bridging the digital gap amongst citizens. This will be implemented in the Shiselweni and Lubombo Regions.

13.5   Programme 5: Digital Literacy and ICT Impact Training

13.5.1   Objective

The Fund will improve digital literacy across the Kingdom by providing ICT access and training that will benefit not only students but also other non-formal learners and the wider public. It will fund a range of digital literacy projects and will have a range of target groups. It will also provide key players that have an impact on socio-economic development and governance and understanding of the impact of ICT.

13.5.2   Beneficiaries

Eligible organisations who provide training may bid for training subsidies and be selected based on cost, quality of training and level of training, amongst others.

Training will be provided to programme 1 -4 beneficiaries, as well as public sector and research institutions

13.5.3   Goals

The goals of this programme are:

- To encourage the development of local content to, in turn, increase the usage and uptake of broadband
- To Support digital literacy across the population
- Support the successful implementation of Programmes 1 – 4.

13.5.4   Description

The UASF will support the provision of training by institutions such as schools, IT training academies, relevant government institutions such as RSTP, and NGOs that have existing infrastructure, especially in terms of an existing suitable building for training activities, as well as existing training staff.

The UASF will support:

a) Digital literacy, training and capacity building projects that facilitate the implementation of its other projects and therefore make them impactful and sustainable.
b) Training and capacity building for Parliament, government departments and agencies, other sector specific regulators, research institutions on the impact and uses of ICTs.

14.   RELATED PROCESSES

ESCCOM will undergo the following processes and procedures to facilitate the implementation of the programmes outlined in this Strategy.

a) Encourage the speedy appointment of the Universal Service Committee that will oversee the implementation of this Strategy; and ensure the proper staffing and resourcing of the organisation by professional and capable staff.

b) Develop a website that is dedicated to the Fund – it may be linked to the ESCCOM website, but should include details on the Strategy, Universal Service Committee, the relevant legislation and regulations, the Fund Manual, staff and other key information on programmes, projects and bids. It should be a 'one stop shop' for all information relating to the Fund.

c) Review and amend the Fund Manual to align with this Strategy. As an example, the positioning of the Fund identity will need to be revised. Once the Fund Manual is reviewed it should be appropriately published and marketed to increase the Fund's visibility and ensure transparency and fairness in the allocation of funds.

d) Conduct an annual stakeholder evaluation to identify potential strategic partnerships. Partnerships with key agencies will be used to provide co-financing for projects, where appropriate. Many of these partnerships may be primarily managed by the partner organisations, with the UASF being the funding partner.

e) Review and amend regulations and legislation to take into account learnings from the strategy development process, and to enable the Fund to take advantage of innovation and ICT sector developments. This is not required for implementation of the current strategy, which is aligned with existing regulation and regulations, but may benefit future reviews. (See Legal and Regulatory Considerations, Appraisal Report)

15.   FUNDING THE UAS PROGRAMME – SOURCES OF FUNDS

The following interventions will be pursued to secure funding for the UAS programme:

Resourcing

a) Explore all sources of funding, beyond the levy, as permitted by the laws governing the Fund.

b) Increase the contributions to the UAS Fund to be in line with international best practice levels i.e. at least 1.0% of in order to align the levy with regional benchmarks, and to enable the Fund to meet the needs and requirements of this strategy (See Appraisal Report)

c) Strategically partner with civil society, donor organisations, NGOs and private sector companies across the economy on projects of mutual interest. Partners may contribute financially or may provide in-kind contributions in the form of training, branding and marketing or other expertise and resources.

Sustainability, transparency and accountability

The Fund will

a) support projects and initiatives that facilitate the sustainable provision of ICTs;
b) remain highly transparent and accountable to the citizens of Eswatini and its partners in government, the private sector and civil society.
c) continue to support the use of the most appropriate proven technology-neutral solutions under common international standards.
d) prepare annual report and audited financials each year.
e) Ensure that there is an equal opportunity for all licensees to access subsidies; and ensure that similarly situated beneficiaries can access funds based on the project design.

The third Fund strategy will be updated timeously and ready for the next strategy round 2024-2027;

16. MONITORING AND EVALUATION FRAMEWORK

16.1 Key Issues for Monitoring and Evaluation

Effective, performance information will become a very important and useful management tool for the purposes of planning, budgeting, implementation, monitoring and reporting. Performance information also facilitates greater accountability, enabling legislators, members of the public and other interested parties to track progress, identify the scope for improvement and better understand the issues involved.

The monitoring and evaluation framework should:

- assess if the intended objectives and benefits of the Strategy are achieved through its implementation.
- assess if the objectives and benefits are achieved efficiently in terms of costs and resources;
- identify when the UASF needs to put in place corrective measures in the event that a program underperforms; and when it should codify successful implementation models or characteristics.

The Fund will use a results-based M & E approach focussing on outputs, outcomes and impact. The monitoring and evaluation programme for the Fund will furthermore be aligned with the existing tools for performance information measurement used by the Eswatini government – reference is therefore to be made to rules developed by the Department of Finance. and any other public sector guidelines on monitoring and evaluation (M&E).

16.2 Programme and Project Input, Output and Outcome Evaluations

Although this was not done in the previous strategy, given the 3 year of experience of the Fund and its maturity, it is appropriate for the Fund to prepare annual reports and report to the USC, Board of Directors and ESSCOM CE on:

a) Number, scope, size and expected benefits of projects that have been funded by the Fund in the year under review,
b) Budget and financial inputs, activities and outputs for each project, including the level of subsidy. Audited financial statements should be produced to support the financial reporting.
c) Non-financial inputs, activities and outputs of the UAS initiatives under the Fund.

The annual reports will shed light on important evaluation information of the immediate outputs and the longer-term outcomes and socio-economic impact of Fund projects in the communities they serve and in the Kingdom as a whole. Those results will serve as the basis for future strategy review and programme design.