# UNIVERSAL ACCESS AND SERVICE (UAS) REGULATORY STRATEGY FOR BROADBAND AND BROADCASTING SERVICES, 2018-2021

SCCOM

UNIVERSAL SERVICE OBLIGATION FUND

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ABBREVIATIONS

| Abbreviation | Definition |
|---|---|
| **BTS** | Base Transceiver Station |
| **CAPEX** | Capital Expenditure |
| **CDMA** | Code Division Multiple Access |
| **CEO** | Chief Executive Officer |
| **ICT** | Information and Communications Technology |
| **ITU** | International Telecommunications Union |
| **M&E** | Monitoring and Evaluation Plan |
| **Mbps** | Megabits per second |
| **MTN** | Mobile Telephone Networks (Pty) Ltd |
| **NGO** | Non-Governmental Organisation |
| **OFN** | Optic Fibre Network |
| **OPEX** | Operating Exchange |
| **PPP** | Public Private Partnership |
| **RSTP** | Royal Science & Technology Park |
| **SCCOM** | Swaziland Communications Commission |
| **SDAC** | ESWATINI Digital Access Centres |
| **SEC** | Swaziland Electricity Company |
| **SMME** | Small-, Micro- and Medium-sized Enterprises |
| **SPTC** | Swaziland Post and Telecommunications Corporation |
| **TBS** | Transportable Base Station |
| **TV** | Television |
| **UAS** | Universal Service and Access |
| **UAI** | ESWATINI Universal Access Initiative |
| **USOF Committee** | Universal Service Obligations Fund Committee (SCCOM) |
| **USOF** | Universal Service Obligations Fund |

# 1. INTRODUCTORY COMMENTS ON SCCOM REGULATORY STRATEGY FOR UAS

One of the core long-term strategic objectives for SCCOM is to fulfil and achieve universal access and service to high speed, high capacity, high quality, highly reliable and affordable broadband Internet ESWATINI. Achieving this will take longer than the span of a three-year strategy. Some strategy tools will have medium term effects (three years), while some will have long-term effects (five years and longer).

Based on the extensive review and baseline report on the state of access and service in ESWATINI in 2017, the following section outlines the SCCOM UAS strategy for the initial three-year period, including the following components:

- The strategic objective for SCCOM during the life cycle of this initial UAS strategy for broadband, 2018-2021;
- The foundation framework, goals and principles including key regulatory initiatives with respect to UAS;
- The UAS three-year programme 2018-2021, including a set of key interventions; and
- An action plan and budget for the UAS three-year programme.

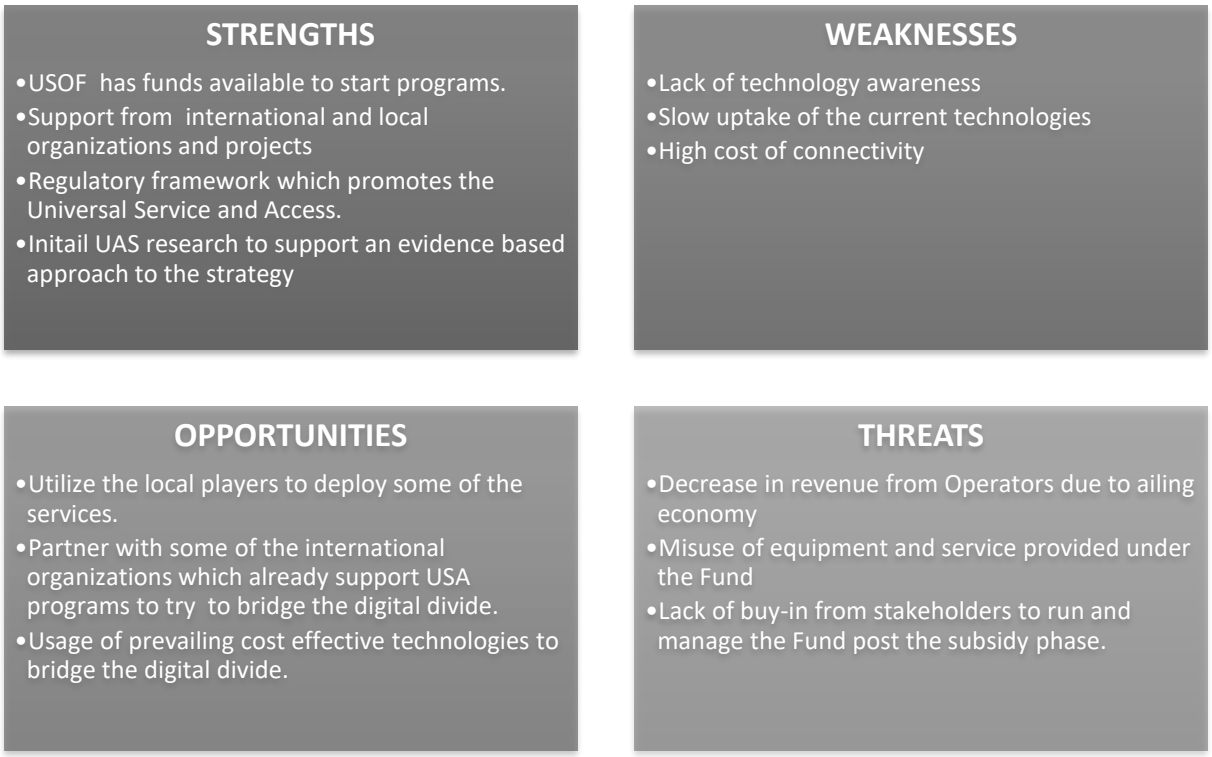
The foundation framework outlines the initial focus of SCCOM in preparing the foundation for achieving the long-term goals of UAS. It includes a set of key regulatory and related interventions that SCCOM can lead, guide and facilitate for the sector over the next three years (2018-2021). The aim is: (i) to 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 extend the market efficiency frontier towards the sustainability frontier; and (ii) to develop business models for basic connectivity of voice and data access and Internet usage between the sustainability frontier and the universal access and service frontier.

To achieve this, SCCOM will need to focus on a few key initiatives, including ensuring universal access to telecoms, broadcasting and postal services; harmonising existing licenses; creating the universal broadband initiative and forming strategic partnerships in relation to this; levelling the playing field for competition; strengthening broadband backbone infrastructure and facilitating access to this; funding the UAS programme; and developing mechanisms to ensure transparency. Each of these is addressed in the proposed SCCOM regulatory strategy.

## 2. STRATEGIC FRAMEWORK

### SWOT Analysis

The Universal Service Strategy articulates the vision and programmes for ESWATINI 's Universal Access and Service. Within this strategy are some strengths and weaknesses that have been identified; as well as Opportunities and Threats. The analysis of these four dynamics is elaborated on below.




**Strengths**

The USOF has funds that are available, these funds have accumulated over 8 years. Initially the fund contributions were paid to SPTC, this money was then transferred to SCCOM and licensees continued to make contributions to SCCOM as per their license conditions. The UAS Fund is therefore geared to "hit the ground running" and start delivering on the programmes set out in the strategy with the funds available.

In 2017, SCCOM conducted a market study which included a Universal Access and Service market analysis. This market analysis included an international benchmark exercise, which has resulted in a Strategy that is supported by research and can be realistically implemented. Furthermore, potential international and local partnerships have already been identified on which to start the programmes.

The SCCOM's regulatory framework promotes and supports the programmes of the Universal Access and Service Strategy. The regulatory alignment ensures that the strategy is sound and that the USOF Committee and SCCOM are accountable to the stakeholders of the industry.

**Weaknesses**

The USOF will face three perceivable weaknesses; this is not an exhaustive list of weaknesses as some weaknesses will arise as the strategy is implemented.

The first weakness identified is the lack of technology awareness in the Kingdom of ESWATINI; this includes changes and progressions in technology and existing technological trends. The lack of technology awareness could lead to poor uptake of technological development which the industry has invested in.

The slow uptake of current technologies is largely due to the first weakness which relates to poor technology awareness. It is also linked to the high cost of communications, and specifically connectively in ESWATINI.

The weaknesses that have been identified will be tackled through the USOF programmes, and also through regulatory measures taken by SCCOM. This strategy deals only with areas in which the USOF can play a role in addressing these challenges.

**Opportunities**

There is great opportunity to utilise the local Internet Service Providers and operators, as contributors to the Fund and key industry stakeholders, to deploy the infrastructure and services that are included in the programmes set out in this strategy.

The USOF has opportunities to partner with international organisations which support Universal Service and Access programmes to further bridge the digital divide. Lastly, this will be premised on the Fund's usage of the prevailing cost effect technologies to bridge the digital divide.

**Threats**

The biggest threat facing the Fund, as well the Kingdom of ESWATINI, is the ailing economy which would lead to a decrease in revenue for the operators which would have a direct impact on the size of contributions the Fund receives annually. This is a threat that is larger than the immediate impact of the Fund but affects the whole nation's quality of life; a mitigation to this is a matter of national importance.

Closely related to the weaknesses identified is the real threat of the equipment and services being abused and misused for purposes other than what they were intended. This can be mitigated through rigorous monitoring and evaluation after implementation; as well as community accountability.

Lastly, the success of the Fund rests largely on the buy-in from relevant stakeholders; the absence of which could amount to decreasing return on investment. The threat of stakeholders

not taking ownership of programmes to run and manage the implementation of these programmes could lead to the investment not yielding the intended and envisioned results.

## MISSION

Our Mission is to contribute positively to bridging the Digital divide and to facilitating socio-economic development in ESWATINI.

## VISION

The Universal Service Obligation Fund, shall be the catalyst for enabling technology in our communities which will stimulate growth in the sector thereby fueling socio-economic growth in the country and improving the daily lives of citizens.

## VALUES

Sustainability, Transparency, Accountability & Partnership.

# 3. STRATEGIC OBJECTIVES

| | |
|---|---|
| **Medium-term (three-year) strategic objective** | To develop and strengthen the principles and foundation framework essential to achieving the long-term goal of universal access and service (UAS) for broadband Internet, broadcast and postal services in ESWATINI's four regions, including UAS for individuals, households, SMMEs, schools and health facilities. |
| **Long-term goals (Year 4 and beyond)** | 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. |

In the absence of national broadband targets, which are pending the finalisation of the National Broadband Plan and Strategy, the SADC Broadband Targets for 2025 as adopted by the Meeting of SADC Ministers Responsible for ICT will be used for ESWATINI. Namely, the USOF will be used to support the attainment of the following strategic objectives as adapted for ESWATINI:

(i). By 2025, entry-level broadband services (SADC Definition) should be made affordable ESWATINI, at less than 2% of monthly Gross National Income per capita;
(ii). By 2025, entry-level terminals and household installation for fixed or mobile broadband should be made affordable ESWATINI, at less than the equivalent of US$50 or 2% of yearly gross national income per capita;
(iii). By 2025, 80% of the population should be covered by broadband services. In particular, at least 80% of rural areas should be within the reach of entry-level broadband services, be it fixed or mobile;
(iv). By 2025, 50% of the Households ESWATINI should be connected to broadband;
(v). By 2025, 60% of youth and adults should have achieved at least a minimum level of proficiency in sustainable digital skills;
(vi). By 2025, unconnectedness of Micro-, Small- and Medium-sized Enterprises should be reduced by 50%, by sector;
(vii). By 2025, 40% of the population should be using digital financial services; and
(viii). By 2025, gender equality should be achieved across all SADC Broadband targets.

Whereby:

(i). Entry-level terminals shall mean devices that facilitate connectivity and they include mobile phone devices, modems and other customer premises equipment;

(ii). Entry-level broadband shall mean be have the following definitions:
- Mobile broadband: at least 1 Mbps (downlink); and
- Fixed broadband: at least 4 Mbps (downlink).

This strategy will cover the period 2018 to 2021, and therefore it is the target of SCCOM to, by 2021, have achieved at least 65% of the targets set by SADC and reflected above. This is a stretch target taking into account the readiness of the USOF, the ambitions of ESWATINI and our desire to facilitate achieve the SADC goals ahead of schedule.

## 4. STRATEGIC PILLARS

These strategic areas form the four pillars that support the realization of the strategy as follows:

- **Affordability:** To increase affordability of communications through enhanced competition and effective regulation
- **Accessibility:** To prioritise increase the access in new locations and facilities; and to improve the quality of access locations and facilities that already have access by upgrading internet quality to broadband
- **Subsidisation:** To use the Fund to create key interventions to address the market access gap
- **Research:** To ensure an evidence base strategy, programmes and projects; to facilitate tangible and quantifiable outcomes; and to enable SCCOM to have baseline information to achieve and measure progress on the strategic objectives and targets

It should be noted that all strategies are 'rolling" mechanisms; so they require routine monitoring and review and updating to take account of changing environment and the successes already achieved.

## 5. GOALS

The core strategic objective is based on creating a foundation for increased access to ICTs ESWATINI, with a key focus on broadband development. This implies the following goals:

- To promote that licensed operators increase the level of ICT and broadcasting service in households through the existing infrastructure and additional infrastructure; and
- To increase the level of ICT and broadcasting access in identified facilities, namely health facilities, education facilities and e-government facilities.

## 6. FOUNDATION FRAMEWORK

### Market liberalisation: Telecoms, broadcast and postal services

SCCOM will continue to regulate the ICT and broadcasting sectors in the public interest through the development and enforcement of regulations and license conditions that support competition and its associated benefits, i.e. lower prices, better quality and more choice for consumers. These will in turn positively impact on ESWATINI's ability to meet UAS targets and specifically increase availability, accessibility, affordability and awareness of telecoms, broadcasting and postal services.

### ESWATINI Universal Access Initiative (UAI)

SCCOM will clearly define what is required for an ESWATINI Universal Access Initiative (UAI) from the regulatory perspective. To this end, SCCOM should start a process of consultation, beginning with a consultation paper to be drafted by SCCOM and delivered to operators and government stakeholders for the first stage in a consultation process. This strategy begins the definition process and:

- Defines universal access and service with respect to broadband for the period 2018-2021 at an initial minimum speed s of 1Mbps (downlink) for mobile broadband and 4Mbps (downlink) for fixed broadband access as per the SADC targets.
- Identifies the post office as a key partner in rolling out universal access to ICTs for the period 2018-2021
- Sets out the regulatory approach to advancing competitive broadband markets.
- Sets out the process for formulating a national broadband backbone implementation plan through the use of regulatory incentives to operators.
- Establishes SCCOM as the strategic regulatory partner to advance implementation of the ESWATINI e-government programme.

The USOF's mandate includes postal and broadcasting services. Partnerships with the Post Office are envisaged in fulfilling its mandate as set out in this strategy. However, the broadcasting elements of the strategy will only be operationalised once the policy and legal framework for same is in place.

### Build strategic partnerships that support the UAI

SCCOM will focus on building strategic partnerships to promote access to broadband and support the implementation of the e-government programme across the country, working within its regulatory mandate. This includes:

- Creating the ESWATINI Universal Access Initiative aimed at highlighting and finalising the required regulatory interventions, in conversation with the Office of the Prime Minister; the Ministry of ICT; the Ministries of Finance, Education and Health; the RSTP, industry and other stakeholders;
- Positioning SCCOM as the facilitator for all regulatory matters required for success of the e-government programme, a key beneficiary of a successful UAS strategy; and
- Positioning SCCOM to establish the regulatory environment required for digital innovation, such as the initiatives hosted by the RSTP for the development of applications and content that will support the e-government programme and other commercial start-up activities.

## 7. UAS PROGRAMMES

The UAS programme defines the types of activities that SCCOM will fund over the three-year period based on its existing financial resources, estimated at SZL 32 million.

It is noted that collections will vary from year to year as will project costs, as such, the budgets set out herein are indicative.

The UAS programme consists of five parts:

| | |
|---|---|
| **Programme 1:** | Connectivity for facilities, such as community centres, schools and health facilities (demand side measures) |
| **Programme 2:** | Management of the Universal Service Committee (USC) |
| **Programme 3:** | Network Infrastructure enhancement for backbone and last mile access to broadband Internet (supply side measures). This sub-programme will prioritise Lumbombo and Shiselweni regions. |

| | |
|---|---|
| **Programme 4:** | Development of ESWATINI Digital Access Centres (SDACs) |
| **Programme 5:** | Universal Broadcasting Access |

## Programme 1: Connectivity for facilities

### Objective

*The objective of this sub-programme is to facilitate broadband connectivity for health facilities and schools; and government-wide connectivity for future e-government projects and programmes using the most efficient last mile technologies with broadband access with a minimum of 1Mbps (downlink) for mobile broadband and 4Mbps (downlink) for fixed broadband.*

The goals are three-fold:

- To facilitate connectivity for schools and health facilities that are currently not connected to the network;
- To upgrade to broadband and improve the connectivity already existing for health facilities, schools and future e-Government centres; and
- To encourage preferential cost-based rates for broadband connectivity for all facilities through regulatory incentives and 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.

The above objective should take into consideration the use of the most cost effective and high-quality last mile technologies for broadband access with minimum download speed of 1Mbps (downlink) and 4Mbps (downlink) for mobile and fixed broadband respectively.

### Description

SCCOM / USOF Committee and the key Ministries for ICT, health, education and identified e-government services should collectively negotiate a long-term cost-based, wholesale competitive price contract for connectivity with operators including SPTC, MTN and other existing operators, as well as qualified public-sector providers of capacity such as Swaziland Electricity Company (SEC). A least cost bid may be issued by SCCOM/ USOF Committee to objectively and transparently determine the provider of connectivity.

The related Ministries will be encouraged to revise the budget component in each of their facilities related to the provision of ICT services and solutions to these facilities, whether for the public or their staff, to reflect costs related to (i) broadband connectivity (ii) computer and other related equipment and (iii) an ICT skilled technician.

The USOF programme will fund selected facilities in co-ordination with the Ministries of ICT, Health and Education and Ministries responsible for identified e-government services to increase and improve broadband connectivity through a limited subsidy. This limited subsidy will include provision for:

a) computer equipment;
b) last mile connectivity equipment;
c) monthly connectivity charges; and
d) a limited Opex budget over three years.

The UAS Programme will specify the number of schools, health and other government facilities that can be covered during this time of the strategy on an annual basis. It will also be identified with other government facilities that support the e-government strategy are eligible on an annual basis.

### Estimated budget

The allocated budget for Programme 1: Connectivity for facilities is E6.8 million (year 1: E1.1m; year 2: E2.9m; year 3: E3.4m).

| **Targets/ Activities** | **Year 1: 2018 – 2019** | | | | | | |
|---|---|---|---|---|---|---|---|
| | **CAPEX Y1 (per unit)** | | | **OPEX Y1 (per unit)** | | | |
| | **Number** | **Installation** | **Equipment** | **Connectivity** | **Maintenance** | | **Subtotal** |
| **Schools** | 6 | 20,000 | 30,000 | 48,000 | 12,000 | | 660,000 |
| **Health Facilities** | 4 | 20,000 | 30,000 | 48,000 | 12,000 | | 440,000 |
| **Subtotal** | 10 | | | | | | 1,100,000 |
| **Targets/ Activities** | **Year 2: 2019 – 2020** | | | | | | |
| | **CAPEX Y2 (per unit)** | | | **OPEX Y2 (per unit)** | | **OPEX** | |
| | **Number** | **Installation** | **Equipment** | **Connectivity** | **Maintenance** | **Facilities Y1** | **Subtotal** |
| **Schools** | 8 | 21,400 | 32,100 | 51,360 | 12,840 | 385,200 | 1,326,800 |
| **Health Facilities** | 6 | 21,400 | 32,100 | 51,360 | 12,840 | 256,800 | 963,000 |
| **Subtotal** | 14 | | | | | | 2,289,800 |
| **Targets/ Activities** | **Year 3: 2020 – 2021** | | | | | | |
| | **CAPEX Y3 (per unit)** | | | **OPEX Y3 (per unit)** | | **OPEX** | |
| | **Number** | **Installation** | **Equipment** | **Connectivity** | **Maintenance** | **Facilities Y2** | **Subtotal** |
| **Schools** | 8 | 22,898 | 34,347 | 54,955 | 13,739 | 961,716 | 1,969,228 |
| **Health Facilities** | 6 | 21,400 | 32,100 | 51,360 | 12,840 | 686,940 | 1,393,140 |
| **Subtotal** | 14 | | | | | | 3,362,368 |

It is noted that programmes exist (outside of the USOF) to fund ICT centres and computer labs. USOF will seek to support schools under existing programmes and provide support to

schools that already have connectivity. The objective is to achieve the most impact with the limited funds available.

## Programme 2: Management of the USC

### Objectives

*In line with legislation, the UAS Fund, managed by the USC, will cover the costs of management of the funding programmes out of the funds provided to the USOF by operators. The administration of the USOF Committee will be funded directly by SCCOM rather than by the Fund. The USOF Committee will manage the UAS programme and budget and will be responsible for the related monitoring and evaluation activities, which will take place every year.*

The goals are as follows:

- To form a core organisation for the USOF Committee to be effective in performing its tasks. This core organisation includes a Director for the Programme, a part time engineer, part time legal advisor and an administrative assistant.
- To cover the cost of hiring highly motivated professionals to run the USOF Committee and all UAS programmes ESWATINI.
- That SCCOM facilitate resources to cover the additional costs for the USC, including research to determine the baselines for achieving the targets as agreed amongst SADC Member States.

### Description

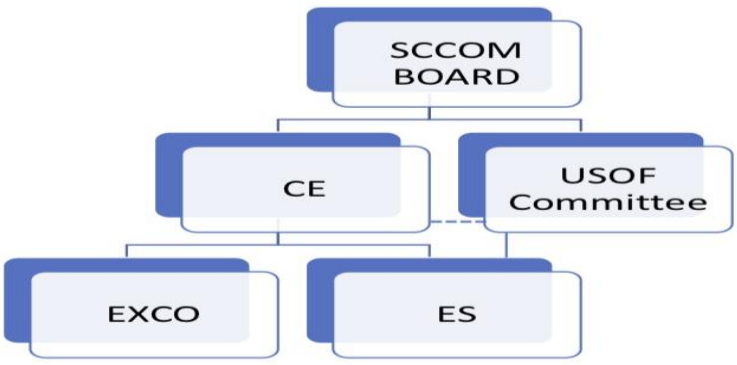


Figure 1. Organisation

SCCOM will appoint a professional Executive Secretary for the USOF Committee, who will manage and oversee the successful execution of the strategic programme and will promote universal access throughout the country. This full-time position will be part of SCCOM management team.

SCCOM will appoint and pay for an additional professional support staff as an office administrator to assist with the office work and some of the project work.

The USOF will be a department at SCCOM and will be supported technically by the various departments of the Commission. Some of the of the support that it will receive is listed below;

i. Technology support for project management and technology support
ii. Strategy support for communications, pricing, strategy drafting, market survey and customer insights
iii. Legal support for all legal related matters, contract drafting and management and board/committee matters.
iv. Finance support for all financial management, tender and procurement.
v. Human capital support for administration related matters.

SCCOM will also cover the following expenses of the USOF Committee through its own existing resources:

a) Cost of the office space at SCCOM headquarters, office computer equipment facilities, transport, connectivity and other office expenses;
b) Cost of national promotional campaigns, documentation and public relation programmes by the USF aimed to make projects that promote increased access to ICTs more visible;
c) Other costs of the USF that are not within the budget allocated from the UAS Fund.
d) Costs of research to assist with determining the baseline for the targets as set out in this strategy; and research to continuously monitor and evaluate progress.

**Estimated Budget**

The estimated budget for Programme 2: Management of USOF Committee is E 3.2 over three years.

| Management of UAS | Salary/ Yr. 1 | Subtotal | Salary/ Yr. 2 | Subtotal | Salary/ Yr. 3 | Subtotal | Total |
|---|---|---|---|---|---|---|---|
| **Director of the UAS Full-time** | 1,000,000 | 1,000,000 | 1,080,000 | 1,080,000 | 1,166,400 | 1,166,400 | 3,246,400 |
| **Subtotal** | | 1,000,000 | | 1,080,000 | | 1,166,400 | 3,246,400 |

## Programme 3: Network Infrastructure enhancement

### Objective

*The objective of this programme is to strengthen the network backbone infrastructure, fixed and mobile, based on a technology-neutral approach, to increase network reliability and redundancy.*

The programme goals are:

- To establish the network infrastructure baseline by conducting a complete audit of existing backbone infrastructure in ESWATINI
- To increase coverage through subsidisation of network extension
- To increase coverage through the subsidisation of the optimisation or enhancement of existing networks

### Description

a) SCCOM / USOF Committee will interact with the different relevant Ministries to conduct a complete audit of existing backbone infrastructure, as some mentioned in this report. The OFN implemented by the SEC is of particular importance.

b) SCCOM will regularise the licensing of any past, present or future network infrastructure operators, whether private or government, the have built any backbone or backhaul infrastructure. SCCOM should maintain a full audit of these assets through GIS maps and other information.

c) The construction of infrastructure may be outsourced to the private sector under competitive bidding procedures in line with Swazi legislation and procurement procedures applicable for the implementation of disbursement of funds from the USC.

d) Existing BTS will be upgraded and BTS capacity will be increased. The geographic focus for the first three years of the strategy for this programme will be the regions of Shiselweni and Lubombo.

e) Network infrastructure (supply-side) enhancement project financed by the USOF 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 SDACs. This additional connectivity will be funded by the UAS Fund, along with the backbone infrastructure project. The USOF 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 USOF 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.

f) Any ad-hoc requests for funding from the USOF 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).

g) The least cost subsidy model implies that the USOF 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.

h) 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.

i) 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 USOF in order to implement that project.

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

k) Each one of these projects, whether initiated from an operator request, or originated by the SCCOM/ USOF Committee, 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.

## Estimated budget

The estimated budget for the three years of the programme is E21.0 million.

| 3 | Infrastructure enhancement | | Number | Subsidy Max % | Max CAPEX subsidy | Max OPEX subsidy | Max Subsidy/unit | Subtotal |
|---|---|---|---|---|---|---|---|---|
| | Project A | TBS Shiselweni | 3 | 50.0% | 240,000 | - | 240,000 | 720,000 |
| | | Facilities Connected | 9 | 100.0% | 65,000 | - | 65,000 | 585,000 |
| | Project B | TBS Lubombo | 3 | 50.0% | 240,000 | - | 240,000 | 720,000 |
| | | Facilities Connected | 9 | 100.0% | 65,000 | - | 65,000 | 585,000 |
| | Supplementary Funding (Connectivity only) | | | | | | | 3,000,000 |
| | OPTIC FIBRE/ WIRELESS LINK km | | 0 | | | | | |
| **Subtotal** | | | | | | | | 5,610,000 |
| 3 | Infrastructure enhancement | | Number | Subsidy % | CAPEX subsidy | OPEX subsidy | Subsidy per unit | Subtotal |
| | Project A | TBS Shiselweni | 6 | 50.0% | 256,800 | - | 256,800 | 1,540,800 |
| | | Facilities Connected | 18 | 100.0% | 69,550 | - | 69,550 | 1,251,900 |
| | Project B | TBS Lubombo | 6 | 50.0% | 256,800 | - | 256,800 | 1,540,800 |
| | | Facilities Connected | 18 | 100.0% | 65,000 | - | 65,000 | 1,170,000 |
| | Supplementary Funding (Connectivity only) | | | | | | | 2,000,000 |
| | OPTIC FIBRE/ WIRELESS LINK km | | | | | | | |
| **Subtotal** | | | | | | | | 7,503,500 |
| 3 | Infrastructure enhancement | | Number | Subsidy % | CAPEX subsidy | OPEX subsidy | Subsidy per unity | Subtotal |
| | Project A | TBS Shiselweni | 6 | 50.0% | 274,776 | - | 274,776 | 1,648,656 |
| | | Facilities Connected | 18 | 100.0% | 74,419 | - | 74,419 | 1,339,533 |
| | Project B | TBS Lubombo | 6 | 50.0% | 274,776 | - | 274,776 | 1,648,656 |
| | | Facilities Connected | 18 | 100.0% | 69,550 | - | 69,550 | 1,251,900 |
| | Supplementary Funding (Connectivity only) | | | | | | | 2,000,000 |
| | OPTIC FIBRE/ WIRELESS LINK km | | | | | | | |
| **Subtotal** | | | | | | | | 7,888,745 |

E 7 million is available for this programme in Supplementary Funding which serves to supplement the costs of connectivity to ensure that the sites and facilities connected obtain high speed broadband access.

## Programme 4: Development of ESWATINI Digital Access Centres (SDACs)

**Objective**

*To support the creation of regional ICT entrepreneurial activity assisted by local, regional or national educational institutions, NGOs, government and others under the leadership of the SCCOM/ USOF Committee.*

The goal is to rollout one fully functional SDAC per region (4 SDAC) over the next 3 years.

**Description**

a) The SDACs are community centres that serve students, local ICT start-ups (ICT services SMMEs) and the general public by offering physical space for connectivity, basic office space for start-up development, conference rooms enabled for video conferencing, and a multimedia room with facilities, it will provide technical courses and certified training on ICT related courses and training in marketing, finance and company management. The SDACs will be enabled to provide access to portals in education, health, and e-Government.

b) The four SDACs under this UAS programme, one per each region, will be several steps above a regular telecentre or community access centre, and are to be the prototypes to test and explore ICT service delivery and basic training in the future, beyond the three years of the strategy.

c) SDACs are multi-sector oriented centres, aligned with the e-Government programme, and as such a partnership should be sought with the office of the Prime Minister under whose leadership lays the ESWATINI e-Government programme.

d) The SDACs will support local ICT-based innovation entrepreneurial activity and will also be a conduit for developing a number of ICT awareness activities in their respective regions.

e) The SDACs will be distributed across the four regions: Hhohho, Lubombo, Manzini and Shiselweni. This will facilitate monitoring and evaluation as well as cross-learning between the different projects. Given the limited estimated budget at present, the UAS programme will support one project per province in the period 2018/2019-2021/2022 (thus a total of four projects). Each SDAC will be connected to backbone infrastructure

that can support at a minimum of broadband over 10 Mbps and ensure reliable broadband internet access to all its users.

f) The USOF Committee will develop a website portal for all and each centre coordinating information sharing between the different SDACs.

g) The order of implementation is recommended in this order: with Hhohho, Manzini, Lubombo and Shiselweni. The reason for this order is to take advantage of the educational resources and market for ICTs already existing in these more dense regions, in order to test the model and provide lessons for when the other centres are implemented in more economic and social challenged regions and also in terms of educational resources and market for ICTs.

The recommended timing for implementation is:

| **SDAC Programme Schedule of Implementation** | | | | | | |
|---|---|---|---|---|---|---|
| | Months into the programme | | | | | |
| | Year 1 | | Year 2 | | Year 3 | |
| | **0-6** | **7-12** | **13-18** | **18-24** | **25-30** | **31-36** |
| **Feasibility study & Implementation Plan** | All SDACs | | | | | |
| CAPEX | | | | | | |
| **Site preparation** | | **Site 1** | **Site 2** | **Site 3** | **Site 4** | |
| Acquisition of equipment | | Site 1 | Site 2 | Site 3 | Site 4 | |
| Last mile connectivity & media equipment | | Site 1 | Site 2 | Site 3 | Site 4 | |
| OPEX | | | | | | |
| Facility lease/ rental if applicable | | | Site 1 | Sites 1,2 | Sites 1, 2, 3 | Sites 1,2,3,4 |
| Other OPEX | | | Site 1 | Sites 1,2 | Sites 1,2,3 | Sites 1,2,3,4 |
| Monthly broadband connectivity | | | Site 1 | Sites 1,2 | Sites 1,2,3 | Sites 1,2,3,4 |
| Manager and other personnel | | | Site 1 | Sites 1,2 | Sites 1,2,3 | Sites 1,2,3,4 |
| Monitoring and Evaluation and end of this period | | | Site 1 | Sites 1,2 | Sites 1,2,3 | Sites 1,2,3,4 |
| Feasibility design SDAC follow-up programme Phase after year 3 | | | | | | * |

The USOF will focus on the following areas in supporting these Centres:

- Location and funding of the premises: Projects should ideally be established close to existing community facilities in education or health. It should be ideally supported by a local community hub, or within the existing building facilities in an existing university or technical institute.
- Equipment provision when this is not available, or when this needs to be upgraded to provide the complete operational requirements. This includes PCs and laptops, telephones, last mile broadband connectivity, television(s), and a multimedia room.
- Broadband connectivity: The Fund will contribute to uninterrupted broadband connectivity more than 10Mbps or more at the SDAC. The USOF Committee will negotiate preferential bulk access to the Internet and will provide its own last mile solution, unless SPTC or another operator offers a better alternative.
- Promoting coordination: An Internet portal will be developed for the USOF Committee funded regional SDACs to promote coordination and sharing of information and resources. Interaction and communication will also be facilitated through hosting of occasional national awareness and promotional events.
- Key salaries: A highly qualified ICT-skilled individual and an operational manager will be the basic requirements for each SDAC. Each SDAC is estimated to need at least two additional part-time support staff with knowledge of ICTs, in order to support the administration and management of the centre.

**SDAC Associated activities**

- Each SDAC will seek to create alliances with local technical institutes and universities, whether regional, national or even international, for the teaching of common or specialised ICT courses.
- Specific activities: Each centre will teach a basic ICT curriculum aimed at the public. Students will need to fulfil basic criteria to be accepted and there will be a nominal fee for each course – especially when these courses are offered for certification.
- The SDAC will promote access to international online courses, some of which can be attended without accreditation at a minimal or no cost. Offered ICT curriculum classes can be as simple as a two-hour seminar on a specific skill, or a short-term course of several weeks with certification (such as Microsoft or Google).

## Estimated budget

The estimated programme budget is E12.3 million.

| 4 | SDACs | No. SDACs | CAPEX Y1 | | OPEX Y1 | | | Year 1 Subtotal |
|---|---|---|---|---|---|---|---|---|
| | | | SEM 1 | SEM 2 | SEM 1 | SEM 2 | | |
| | Feasibility Implementation Plan | 1 | 400,000 | | | | | 400,000 |
| | Subtotal Year 1 | | | 1,100,000 | | | | 1,100,000 |
| | Subtotal Year 2 | | | | | | | |
| | Subtotal Year 3 | | | | | | | |
| | Feasibility follow up after Y3 | | | | | | | |
| **Subtotal** | | | *Capex Y1 = 1,500,000* | | *Opex Y1=* | | | 1,500,000 |
| 4 | **SDACs** | No. SDCAs | CAPEX Y2 | | OPEX Y2 | | | Year 2 Subtotal |
| | | | SEM 1 | SEM 2 | SEM 1 | SEM 2 | | |
| | Feasibility Implementation Plan | 3 | | | | | | - |
| | Subtotal Year 1 | | | | | | | - |
| | Subtotal Year 2 | | 1,150,500 | 1,203,188 | 609,000 | 1,260,630 | | 4,223,318 |
| | Subtotal Year 3 | | | | | | | - |
| | Feasibility follow up after Y3 | | | | | | | |
| **Subtotal** | | | *Capex Y2 = 2,353,688* | | *Opex Y1=1,869,630* | | | 4,223,318 |
| 4 | **SDACs** | No. SDACs | CAPEX Y3 | | OPEX Y3 | | Other | Year 3 Subtotal |
| | | | SEM 1 | SEM 2 | SEM 1 | SEM 2 | | |
| | Feasibility Implementation Plan | 4 | | | | | | - |
| | Subtotal Year 1 | | | | | | | - |
| | Subtotal Year 2 | | | | | | | - |
| | Subtotal Year 3 | | 1,258,154 | 53,218 | 1,957,128 | 2,700,837 | | 5,696,337 |
| | Feasibility follow up after Y3 | | | | | | 600,000 | 600,000 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Subtotal** | | | | | | | 6,569,337 |

The complete budget for the SDAC three-year programme is as follows:

| DIC IMPLEMENTATION PRELIMINARY BUDGET | | | | | Year 1 | | Year 2 | | Year 3 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Description | | | | Months | | | | | | TOTAL |
| | | SDIC | No. | Cost/Year | 0-6 | 7-12 | 13-18 | 19-24 | 25-30 | 30-36 | 12,292,655 |
| C | Feasibility study & Implementation Plan | | | | 400,000 | | | | | | 400,000 |
| | Site preparation | Hhohho | | | | 50,000 | 12,000 | 12,420 | 12,855 | 13,305 | |
| | and annual site | Manzini | | | | | 51,750 | 12,420 | 12,855 | 13,305 | |
| | maintenance | Lubombo | | | | | | 53,561 | 12,855 | 13,305 | |
| | | Shiselweni | | | | | | | 55,436 | 13,305 | 339,370 |
| | Computer equipment | Hhohho | 60 | 15,000 | | 900,000 | | | | | |
| | 3 incubator offices (x5) | Manzini | 60 | 15,000 | | | 931,500 | | | | |
| | 3 classrooms (x10) | Lubombo | 60 | 15,000 | | | | 964,103 | | | |
| | Open access (x15) | Shiselweni | 60 | 15,000 | | | | | 997,846 | | 3,793,449 |
| | Last mile connectivity | Hhohho | | 30,000 | last mile | 150,000 | | | | | |
| | installation equipment | Manzini | | 100,000 | media equipm | | 155,250 | | | | |
| | + media equipment | Lubombo | | 20,000 | installation | | | 160,684 | | | |
| | | Shiselweni | | | | | | | 166,308 | | 632,241 |
| | Subtotal CAPEX per year | | | | | 1,500,000 | | 2,353,688 | | 1,311,372 | |
| OPEX | Facility rental/lease | Hhohho | | | | | 60,000 | 62,100 | 64,274 | 66,523 | |
| | (assumed provided | Manzini | | | | | | 62,100 | 64,274 | 66,523 | |
| | by community or Gov) | Lubombo | | | | | | | 64,274 | 66,523 | |
| | | Shiselweni | | | | | | | | 66,523 | 643,113 |
| | Other OPEX | Hhohho | | 90,000 | | | 45,000 | 46,575 | 48,205 | 49,892 | |
| | materials, repairs | Manzini | | | | | | 46,575 | 48,205 | 49,892 | |
| | utilities, etc | Lubombo | | | | | | | 48,205 | 49,892 | |
| | | Shiselweni | | | | | | | | 49,892 | 482,335 |
| | Connectivity | Hhohho | | 48,000 | | | 24,000 | 24,840 | 25,709 | 26,609 | |
| | broadband monthly | Manzini | | | | | | 24,840 | 25,709 | 26,609 | |
| | charges | Lubombo | | | | | | | 25,709 | 26,609 | |
| | assumed @2000/month | Shiselweni | | 48,000 | | | | | | 26,609 | 257,245 |
| | Staff | | | | | | | | | | |
| | Manager FT | Hhohho | | 320,000 | | | 160,000 | 165,600 | 171,396 | 177,395 | |
| | 1 full-time manager | Manzini | | | | | | 165,600 | 171,396 | 177,395 | |
| | with ICT skills | Lubombo | | | | | | | 171,396 | 177,395 | |
| | | Shiselweni | | | | | | | | 177,395 | 1,714,967 |
| | Teachers/part-time | Hhohho | 2 | 220,000 | | | 220,000 | 227,700 | 235,670 | 243,918 | |
| | 2 part-time ICT trainers | Manzini | 2 | | | | | 227,700 | 235,670 | 243,918 | |
| | and teachers for evening | Lubombo | 2 | | | | | | 235,670 | 243,918 | |
| | classes | Shiselweni | 2 | | | | | | | 243,918 | 2,358,080 |
| | Promotional & PR | Hhohho | | 120,000 | | | 60,000 | 62,100 | 64,274 | 66,523 | |
| | (materials, campaigns) | Manzini | | | | | | 62,100 | 64,274 | 66,523 | |
| | | Lubombo | | | | | | | 64,274 | 66,523 | |
| | | Shiselweni | | | | | | | | 66,523 | 643,113 |
| | Monitoring and evaluation (M&E) | | | | | | | | | | |
| | Monitoring and | Hhohho | | 80,000 | | | 40,000 | 41,400 | 42,849 | 44,349 | |
| | Evaluation | Manzini | | | | | | 41,400 | 42,849 | 44,349 | |
| | Data collection & | Lubombo | | | | | | | 42,849 | 44,349 | |
| | evaluation | Shiselweni | | | | | | | | 44,349 | 428,742 |
| | Subtotal OPEX per year | | | | | - | | 1,869,630 | | 4,657,965 | |
| Feasibility design DIC follow-up programme Phase after year 3 | | | | | | | | | | 600,000 | 600,000 |
| **TOTALS** | | | | | | 1,500,000 | | 4,223,318 | | 6,569,337 | **12,292,655** |

## Programme 5: Universal Broadcasting Access

### Objective

*Universal access to broadcasting has become a critical aspect of the promotion of basic human rights. This is due to a need to facilitate dissemination of information to all citizens. Universal access to information, education, and entertainment requires universal coverage, which is the role of broadcasters and their signal distributors. This forms part of the supply side for the broadcasting service and is relevant to both radio and television. To complete the loop, focus needs to be directed to the user/audience side.*

The USF will support the transformation and expansion of the broadcasting sector, to complement the provision of universal access to multimedia forms of communication and information. There will be two related components to the broadcasting support program: Television Set-Top Boxes and Community Broadcasting.

### Description

(a) Community Broadcasting **-** urge SCCOM to implement the broadcasting licensing framework as it is a vehicle for delivering universal access for special interest communities and geographic areas not yet covered completely by the current broadcasters in terms of dedicated local language content – this programme can only be implemented once that is in place.

(b) The USF commits to support the establishment of community broadcasting at subsidy level for initial costs – this extends to establishing broadcast studios and transmission facilities. The USF will provide support for all four regions to have a local/provincial community television and/or radio channel and radio stations. Support will be given to specific communities identifying a gap that can only be filled by providing localised broadcasting service drive community broadcasting. This is due to demand for broadcasting services in the languages of the local communities and discussing issues relevant to the local communities.

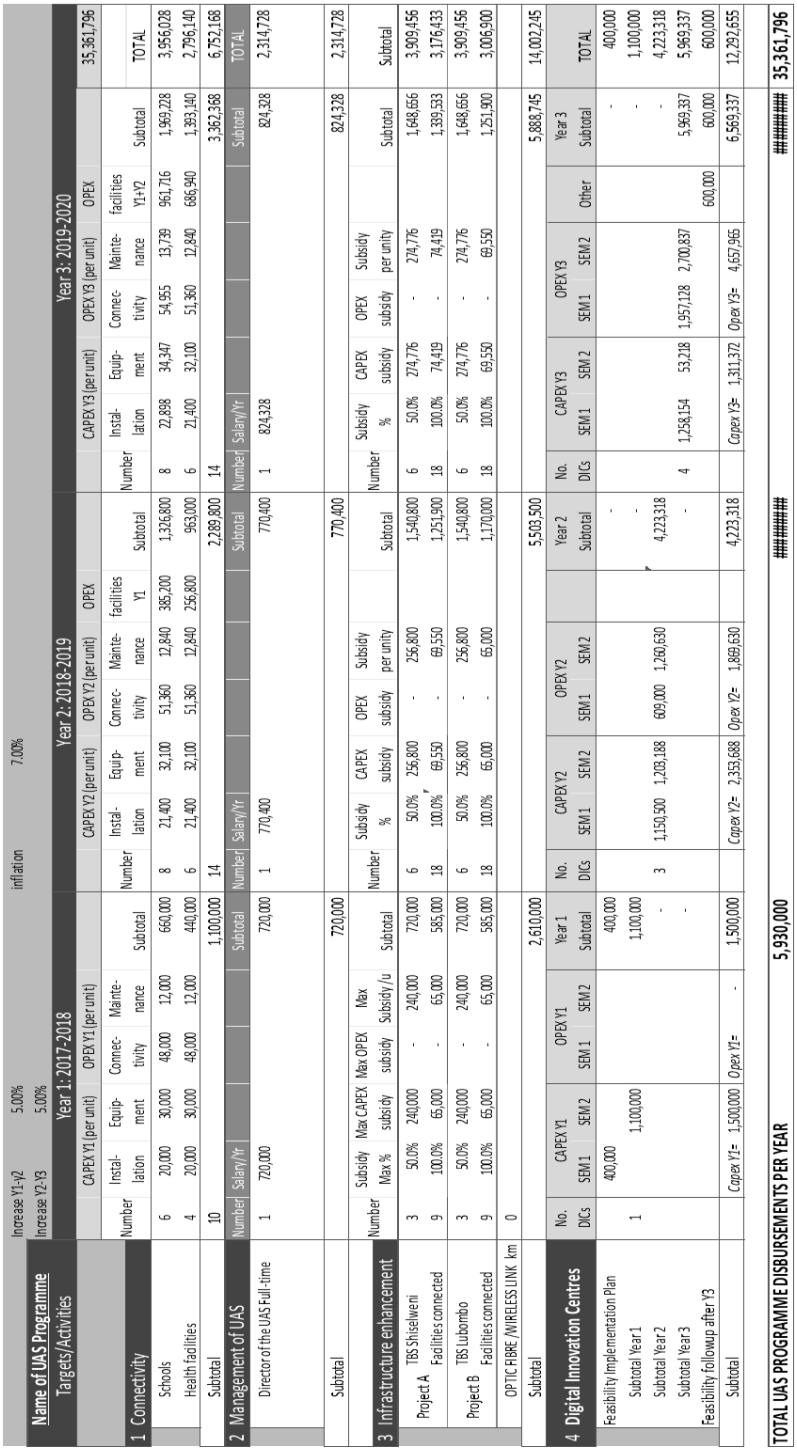
### Estimated budget

No budget estimate is provided given that the licensing framework is a key dependency which may not be completed in the short term.

# 8. BUDGET 2017 – 2020

## Budget

A three-year budget for the UAS programme (in Swazi Lilangeni) is outlined below.



| Name of UAS Programme | | Increase Y1-y2 | 5.00% | | | inflation | 7.00% | | |

In addition, an amount of E 7million has been set aside to supplement the Programme 1 rollout of connectivity which is central to the rest of the programmes and key to achieving universal access and service.

## Balance sheet for the USOF Programme over the strategy period

### Statement of Financial Position

| **EQUITY AND LIABILITIES** | | **Jun-18** | **May-18** |
|---|---|---|---|
| Capital and Reserves | | | |
| Reserves | General Reserve / Beneficiary Funds | 32,267,439 | 32,221,410 |
| Retained Income | Net Profit/Loss this year | 223,331 | 184,995 |
| | | **32,490,770** | **32,406,405** |
| | | | |
| Current Liabilities | Accruals | 11,228 | - |
| | Sundry Creditors | 18,885 | - |
| | Vat / Tax Control Account | 89,230 | 89,230 |
| **Total Equity and Liabilities** | | **32,610,112** | **32,495,635** |
| | | | |
| **ASSETS** | | | |
| Non-current Assets | | | |
| Fixed Assets | Furniture & Fittings - Net value | **24,017** | **24,221** |
| | | | |
| Investments | Investments / Deposits | **32,184,474** | **31,994,922** |
| | | | |
| Current Assets | Customer Control Account | 46,029 | - |
| | NEDBANK UNIVERSAL CURRENT | 44,379 | 66,049 |
| | NEDBANK UNIVERSAL CALL | 311,212 | 410,442 |
| | | **401,621** | **476,491** |
| **Total Assets** | | **32,610,112** | **32,495,635** |

Taking into consideration the final balance of E32.6 million means that the USOF is sustainable and ready to fund the identified programmes.

## 9. RELATED PROCESSES

SCCOM will adopt the following processes and procedures to implement the strategic programmes, in addition to staffing and resourcing the unit.

### Develop a Fund manual

Develop a Fund Manual to ensure transparency and fairness in the allocation of funds. See attached document for approval of the USOF Committee.

**UAS Subsidy Models**

SCCOM will consider the appropriate use of a number of available UAS subsidy models.

### Competitive procurement

Open bidding by competing private sector providers to provide designated infrastructure, services, and facilities. Whenever possible, SCCOM will seek to develop projects that can be implemented through open, competitive procurement processes in partnership with the private sector. In particular, projects involving development of public network infrastructure and services shall be awarded to contracting firms through a public bidding process. The key features of competitive procurement will include the following:

- The rules followed will generally be the same as for standard government procurement. All SCCOM contracts and bidding procedures will comply with all relevant laws and regulations.
- Where standard procurement rules are inadequate to achieve the programme objective, the bidding terms and conditions will be clearly elaborated well in advance and made available simultaneously to all potential bidders.
- All bidding documents (standard terms and conditions, service specifications, any special conditions and the templates of the contracts to be signed by the winning bidders) will be posted on the SCCOM website.
- SCCOM will not specify what technology contractors should use to deliver the desired services, observing technology neutrality. In exceptional cases, where some technical specifications must be given, internationally accepted standards defined by the International Telecommunication Union (ITU) will be used.
- All projects/procurement will be advertised in at least two prominent national newspapers. Additionally, the advertisements will be placed on SCCOM's own website, if available the USOF website and where appropriate, on other relevant government websites.

- All questions received from the bidders, and the written submissions (bids), will be shared with all registered bidders. These questions and answers and any further clarifications will also be posted on the relevant websites for the purposes of transparency.
- Bids will be accepted at the announced bid submission date and time in the presence of all attending bidders, and the major contents of the bids (especially bid-bonds) will be checked in front of all then present.
- Where a technical short-listing is done following a technical bid evaluation, the short-listed bidders will be called again to witness the opening of sealed financial bids.
- Only qualified bidders submitting the LOWEST subsidy request price bid, for an acceptable workable technical solution, will be awarded contracts.

At the conclusion of every bid process, the bid evaluation summary will be made publicly available on the SCCOM and if applicable USOF website, including details of the bidding process, its history, bid amounts, and the bidding result.

**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 SCCOM being the regulatory and UAS funding partner.

**Demand/affordability support**

- Funding to support discounted services or equipment for qualified end-users will typically be delivered in collaboration with suppliers. The USOF and SCCOM should negotiate a favourable rate of discount for connectivity to broadband, for each one of its projects, in advance. This should be made in contractual form.
- Promote national development of and access to backbone network infrastructure

## Improving Access and Affordability

SCCOM will prioritise improving access and affordability with respect to the backbone network infrastructure through regulation of competition and open access approaches. Initiatives under consideration include:

a) Putting in place regulatory measures to advance access to and quality of service of the SPTC national backbone OFN, wireless and CDMA networks.
b) Initiating and facilitating a conversation for an efficient and effective backbone market with respect to the roles and contributions of all existing independent specialised backbone networks, such as those with the Swaziland Electricity Company (SEC), the fire department, correctional services, the police network, and those entities seeking to develop alternative independent specialised networks such as the RSTP and the

Ministry of ICT. It is important that all backbone network initiatives be licensed through SCCOM.

c) Publishing regulatory measures for encouraging further investment and access to backbone network infrastructure, through applying the principles of competition where appropriate and the principles of open access where appropriate, wherever there are no overriding principles concerning security or military priorities.

d) Providing the relevant licensing framework for (c) above.

e) Designing and adopting a cyber-security regulatory framework for ESWATINI that covers access to all backbone network infrastructure.

f) Designing and introducing regulatory measures to encourage private sector and donor investment participation in the provision and expansion of affordable last mile access technology solutions for households, schools and health facilities.

## 10. FUNDING THE UAS PROGRAMME

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

- Conduct an open financial audit of the existing USOF to determine the exact amount of funds currently available for programmes during the three-year period of the strategy.
- Funding a UAS broadband programme prototype focused on selected e-government initiatives, in partnership with USA partner institutions in each of the four regions.
- Providing funding for equipment and other capital expenditure (capex) programmes and connectivity and other forms of operating expenditure (opex) for prototype sustainable community-based ICT access in support of e-government objectives in relation to education and health. This will include addressing training needs to facilitate community involvement.
- Fund and promote initiatives that focus on both the supply side and the demand side for ICT services, and that will encourage participation of SMMEs in the digital economy.
- Increasing the contributions to the USOF to international best practice levels i.e. at least 1.0% of turnover by year three of the strategy (2019/2020 financial year).

## 11. SUSTAINABILITY, TRANSPARENCY, ACCOUNTABILITY

- SCCOM will support interventions and initiatives that facilitate the sustainable provision of ICT and Internet-based services.
- The SCCOM UAS strategy will be updated by the end of 2019, to be ready for the next strategy round 2020-2022.
- SCCOM will remain highly transparent and accountable to the citizens of ESWATINI and its partners in government, the private sector and civil society.
- SCCOM will support the use of the most appropriate proven technology-neutral solutions under common international standards.

# 12. MONITORING AND EVALUATION FRAMEWORK

## Key issues for monitoring and evaluation

A monitoring and evaluation programme for SCCOM and the USOF Committee must be aligned to the existing tools for performance information measurement developed by the Department of Finance. By aligning itself with the Finance Department and any other public-sector guidelines on monitoring and evaluation (M&E), SCCOM and the USOF Committee will enhance their institutional profile and place themselves in a position to use generally accepted government internal resources and tools for implementation.

When 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 use of the Framework for Managing Programme Performance Information is particularly important because:

- It will become an important and effective management tool for SCCOM and the USC.
- It links with the Government-wide Monitoring and Evaluation System.
- It facilitates the linking of SCCOM and the USC's planning, budgeting and reporting to its own performance in indicators and results.
- It enhances the development of performance in indicators.
- It in indicates the level of capacity required to run an effective monitoring and evaluation management system.
- It informs other government institutions' role in performance information management.
- It enables SCCOM and the USOF Committee to perform their reporting requirements more effectively, especially to Parliament.

## Key performance indicators

The following five key performance indicators in indicator concepts are required for an effective monitoring and evaluation system for UAS: Inputs, Activities, Outputs, Outcomes, and Impacts. Figure 1 below illustrates the relationships between the concepts and measuring impact.

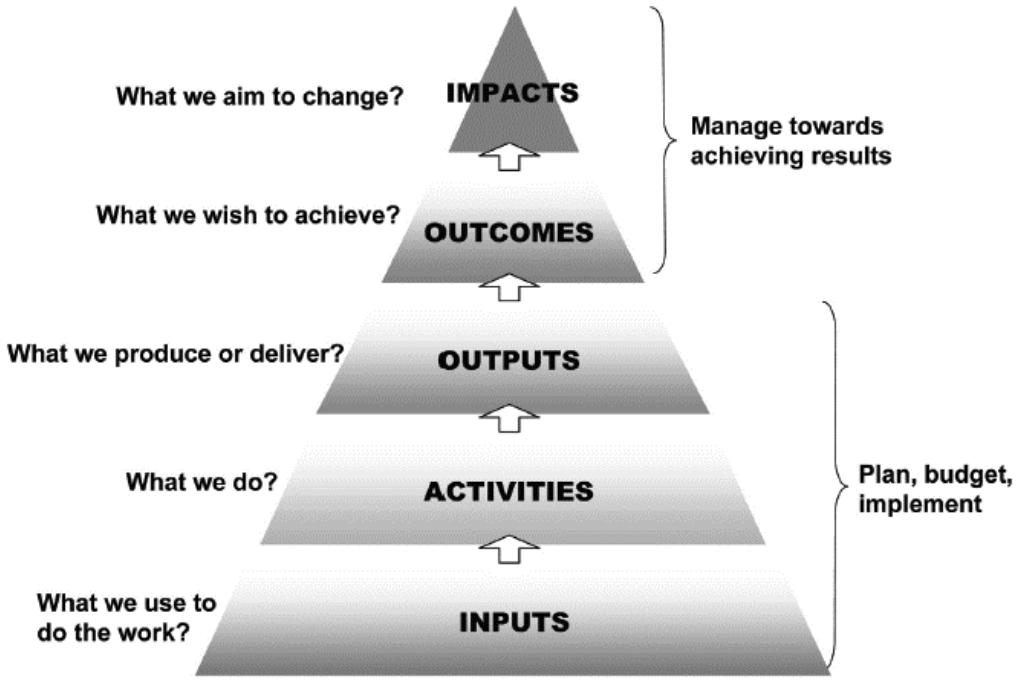



Figure 2: Key Performance indicators

SCCOM will need to determine what indicators it will use to measure the effectiveness of its UAS strategy and, where necessary, do baseline research to measure progress. Many benchmarks have been already set out in the 2017 UAS report, such as the current extent of universal access and service across the four regions.

## Programme and project input, output and outcome evaluations

SCCOM and the USOF Committee should undertake to perform annual surveys in each location of implementation, according to the series of indicators shown in the table, and report to the Board of Directors and CE of SCCOM on its findings. Each survey should require the following:

- Number, scope, size and expected benefits of projects that have been funded by the Fund, in terms of the requirements set.
- Budget and financial inputs, activities and outputs for each location, including the operational expenses subsidy, in order to determine the financial health of the centres in each location and the degree of success, or lack of success.
- Non-financial inputs, activities and outputs of the UAS initiatives under the Fund.
- A series of survey questions for the managers of each centre, to ascertain the challenges and difficulties encountered, as well as the success stories (outcomes).
- A series of survey questions for the users of each centre, in each location, to determine the level to which service delivery has improved, worsened or stayed the same, as well as to understand the user perspective in terms of price and the product offering (future

demand analysis for enhancing the services provided by each centre) (outcomes and, over the longer term, impact).

## Fund programme impact evaluations

The annual surveys will provide SCCOM and the USOF Committee with evaluation information of the immediate outputs and the longer-term outcomes and socio-economic impact of Fund projects in the communities they serve and the society as a whole. Those results will serve as the basis for future programme design.

## Institutional requirements

To successfully perform the M&E requirements, SCCOM and the USOF Committee will need to deploy a small team of professionals, including at least one economist, one engineer or technologist, and one statistician, that will visit each location and provide SCCOM and the USOF Committee with ready feedback when required. As more centres are built and subsidised, the cost requirements for M&E will increase.

The M&E team will present formal mid-year and annual reports to the USC, shared with SCCOM, with a summary of findings and should be ready to respond to questions by the USOF Committee and SCCOM on the status of each centre. The M&E team will present an annual summary of findings to the Board of Directors of SCCOM. SCCOM and the USOF Committee can host this function in-house or outsource this function.

A detailed monitoring and evaluation section is included in Appendix A. In summary, there are a range of components to the monitoring and evaluation process, given the complexity of the process of increasing universal access and service. These components include:

- Monitoring and enforcing compliance with requirements by licensees: SCCOM must ensure that licensees adhere to regulations and licence conditions. SCCOM will also need to assess whether the mechanisms to facilitate fair competition are adequate and proactively address challenges that arise. As highlighted earlier, establishing an ideal environment for fair competition will result in an extension of UAS, pushing access beyond the market efficiency frontier, closer to the sustainability frontier. Ongoing research will be required to assess progress at these frontiers.
- Oversight of USOF and USOF Committee: Performance contracts with USOF Committee appointees and USOF staff, binding them to outputs and outcomes identified in the strategic plan will assist in this process. Establishment of reporting cycles will assist SCCOM and the USOF to report back to the public and key stakeholders on progress.
- Ensuring service providers fulfil obligations: As indicated, many of the projects will be outsourced to service providers. SCCOM will need to ensure that contractors are legally

and contractually bound to fulfil work they have been contracted to do, within budget and time frames and fulfilling all set quality requirements.