



# ANNUAL REPORT

2019



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# STRATEGIC DIRECTION

## WHO WE ARE

SomaliREN is a non-profit, non-governmental membership-based organization founded and owned by its member institutions. As a national research and education network (NREN), it is mandated to build and deploy e-infrastructures for research and education and is registered as such with the relevant agencies and governing bodies.

SomaliREN builds, operates, and maintains e-infrastructures and deploys services that address the needs of the Somali higher education and research institutions, supports the formation of communities of practice, and promotes and builds research capabilities at the member institutions. The NREN is a fast-growing, lean organization that is driven by innovation and continuous service improvements.

SomaliREN is a member of UbuntuNet Alliance, the regional Research and Education Network for eastern and southern Africa, as well as the Arab States Research and Education Network (ASREN). The work of SomaliREN aims to enhance the quality of research and education in Somali higher education institutions.

Its three dimensions inform the mission of the NREN: Connectivity, Community, and Content. These three areas define the essence of what SomaliREN hopes to accomplish. We provide affordable, high-speed connectivity for the research and education communities at our member institutions to empower them to access and publish research and educational content and other value-added services.

### Vision

We collectively see a *“developed and prosperous society enabled by high-quality globally-connected education and research institutions.”*

### Mission

We exist *“to provide affordable and accessible connectivity and innovative services to build a collaborative education and research community.”*

### Core Values

Our Core Values define the way we deal with any situation through thought, word, and deed. They represent the persona of SomaliREN:

- 1. Inclusivity:** we are committed to open and equal membership for all the Somali higher education and research institutions across the country
- 2. Good governance (Transparency; Equity; Accountability; Ethics):** we uphold the highest standards and principles of good governance to improve accountability and effective service delivery.
- 3. Innovativeness:** we continuously enhance the quality and variety of services that we provide to our members

## OUR STRATEGIC PILLARS



### The Organization

Under this priority area, we address issues around membership, organizational human resource, stakeholder relationships (including working with other RENs at regional or global levels), and sustainability. Strengthening the organization is a core priority on which every other area shall build upon and considers organizational capabilities development, relationship building, and community growth as its building blocks.



### Funding and Sustainability

This priority area deals with the identification and engagement of sources of capital expenditure (CAPEX) and operating expenditure (OPEX). Financial sustainability is a core component of this pillar. Strengthening existing partner relations as well as forging new partnerships with donors is necessary for achieving the strategic goals of SomaliREN. A critical aspect of funding that relates to the previous priority area is strengthening the organizational governance and authority to deal with financing institutions as needed.



### Connectivity and Services

This pillar concerns the issues of planning, procurement, rollout and operation of networks, networks services, and cloud services. The commissioning of e-infrastructures shall be determined by the demands of the member institutions SomaliREN's network vision. A critical aspect of this priority is the development of the expertise and capabilities to envisage and implement digital transformation in the member institutions.



### Communities and Content Groups

We support communities of practice (research, librarians, administrators, and other special interest groups). The communities of practice (also referred to as Special Interest Groups) are end-user communities for the services offered by SomaliREN, who will drive the NREN's innovative initiatives that address issues in the higher education and research sector. Under this pillar, SomaliREN aims to facilitate the formation of the communities, to support their activities, and to empower them to produce relevant research output.

# OUR STRATEGIC GOALS

- ✔ Strengthen SomaliREN by increasing the membership base and value to members
- ✔ Review the governance and operational structures and processes to ensure ethical and effective leadership, as well as the requisite range of functional competencies to deliver the strategic plan
- ✔ Build and Develop Stakeholder Relationships
- ✔ Create diversified sources of funding, revenue and investments to guarantee the long-term sustainability of the organization
- ✔ Build communities of practice and facilitate efficient collaboration through continuous capacity development and content hosting
- ✔ Develop and implement a monitoring and evaluation strategy to continuously improve the organization



## A Message from the Chairman



Throughout the years I was involved with SomaliREN, I have witnessed the power of community and what is possible when people and institutions with similar aspirations and goals come together. The potential of our organization to contribute to a positive change in the higher education and research sector is tremendous, and the progress made so far shows how far we can go.

I remember when, not long ago, we came together with the mission to address the challenges facing higher education and research institutions. From our humble early days when we sought to have a shared vision for our future up to this day when our NREN has gained recognition as the fastest growing NREN in the region, it was the commitment of our secretariat and the unwavering support of the member institutions that was consistent. We need to sustain this community to reap the fruits of our perseverance, which has already started since all our members have access to the connectivity we have waited for long.

My most recent visit to our member institutions strengthened my belief in the power of the community. Our universities and research institutions have the potential and the will to collaborate and share the resources we have for a brighter future of our higher education and research institutions. Only when we come together and keep together, can we be able to address the social and economic woes of our societies.

Our membership in the UbuntuNet Alliance and the Arab States Research and Education Network (ASREN) puts us with universities and research institutions that are

working on addressing similar challenges to what we face. For example, the issue of improving the quality of higher education and research output seems to be a crosscutting one across our two regions, the Arab League and Eastern and Southern Africa. By collaborating with them and learning from their experiences, SomaliREN is well-positioned to help the Somali universities and research centers take their works to the next level. However, it all starts with improved connectivity via the digital superhighways among our own institutions and with our peers beyond the borders. With better connectivity, indeed, our institutions can tap the resources of open access journals and help stakeholders to create relevant and desirable knowledge, skill, attitudes, and values.



***We need to sustain this community to reap the fruits of our perseverance, which has already started since all our members have access to the connectivity we have waited for long.***

I have seen that SomaliREN member institutions have relatively significant resources such as infrastructure, students, academic and administration staff. I see an excellent opportunity to share these resources to grow together. It is high time for collaboration, and as in charity, collaboration should begin at home! In this regard, I commend SIMAD University and Jamhuriya University of Science and Technology for organizing joint conferences for the second year in a row.

On behalf of the board, I take this opportunity to thank all our stakeholders and partners, our member institutions, and, most importantly, our cause-driven secretariat for all their meaningful contributions. I look forward to another productive year and see a very bright future for our universities.

**Abdirizak Aden**  
The Chairman

## Forward by the CEO



The end of 2019 marked the 10th anniversary of SomaliREN. It has been ten years since the heads of the founding universities came together to establish a platform that has, over the years, served the Somali higher education and research institutions. The goal was to have a shared, sustainable platform that they can use to address common challenges facing the Somali higher education and research institutions, and having a network was the key.

I am delighted to share with our community that we have hit a very critical milestone in the history of SomaliREN. All our current member institutions, comprising of 20 universities and one research institute, have been connected to the global Internet. Despite the challenges facing our telecommunications industry, including monopolies, inexistent national backbones, and many others, SomaliREN has managed to deliver enhanced connectivity to all the member institutions with the support of the Ministry of Post, Telecommunications and Technology, the World Bank Group and the member universities. We have inched closer to our grand network vision to interconnect among the higher education and research institutions among themselves directly.

We have also made significant developments in our signature initiatives, which are set to go live within 2020. The REConnect initiative has reached a stage where we can initiate the pilot in the first quarter of 2020; the EduSpots project, which has gained recognition among our regional partners as an innovative initiative has also been completed and tested in our lab; and we have secured partners for the Digital Repository Services Initiative and plan to send our

team for training and systems implementation.

The past year also gave good indicators on how the Somali universities have taken the road to digital transformation for improved education and research output. International bandwidth consumption has increased as a result of the subsidized costs of connectivity; universities have invested in ICT infrastructure and building campus networks despite their tight budgets, and technology utilization for education and research has seen a wider adoption with many of our members using video-conferencing facilities in the classrooms. Financial constraints are holding back a faster digital transformation for our institutions, and we continuously seek economically affordable solutions to overcome the budget limitations.



***We hope to continue delivering for our member institutions and our people. Let us all strive together to make 2020 more productive and impactful.***

The annual report for 2019 gives a more detailed picture of our priorities for the year and how we performed as an organization regarding the set targets. It introduces the changes in our governance structure, staff development strategies and achievements. The impact 2019 section gives a fascinating insight into the outcomes of the community's cooperation. Finally, the plans for 2020 are presented while addressing the opportunities and challenges we have identified to affect the results for 2020.

All the achievements and accolades received this year are due to the sustained support of our member universities, the Ministry of Post, Telecommunications and Technology, and the World Bank Group. We thank all of them and our regional partners - UbuntuNet Alliance and ASREN - for the recognition and encouraging sentiments.

The continued success of SomaliREN hinges on their continued support and, more importantly, that of the innovative and industrious team at SomaliREN.

**Abdullahi Bihi Hussein**  
Chief Executive Officer

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# 2019 REPORT

# HIGHLIGHTS

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## Network Infrastructure and Services

SomaliREN's connectivity and network infrastructure efforts are aimed at achieving the network vision of the organization which involves the provision of high speed connectivity by wholly interconnecting the member institutions across all the Somali cities. The network vision segments the network into 3 areas each of one having its own Point of Presence (PoP) that connects the institutions closest to it via the city level PoPs.

Each of the main zonal PoPs have data centers equipped with the necessary core network equipment and services to serve them. So far progress has been made in the completion of interconnectivity and international connectivity as per the following:

### Zone 1

Comprises of Mogadishu and Kismayo based institutions and the data center is hosted by Mogadishu University. This zone connects 36 campuses using wireless radio links, but are scheduled for upgrades to optical fiber connectivity. The average link capacities for the local network is about 500Mbps due to the use of a mix of licensed frequency band equipment's and less used frequency allocations.

The data center at Mogadishu University has been upgraded recently with a second rack and two servers to host the network monitoring and management systems in addition to the services in our portfolio. Aggregate international bandwidth for this zone is 300Mbps with the potential to grow exponentially in the next 12 months.

### Zone 2

Comprises of all the member institutions in the cities of Garowe, Bosaso and Galkayo. Currently this zone connects 7 campuses but are expected to grow up to 20 within the next 12 months. So far, the interconnections are between the city PoPs does not exist, but negotiations are in progress between SomaliREN and Gollis Telecom to complete this aspect of our network. Aggregate international connectivity for this zone is 50Mbps.

### Zone 3

Covers member institutions in Somaliland including universities in Borame, Hargeisa, Las Anod and Burao. The PoP data center is hosted by Gollis University in Hargeisa, and the interconnections between the cities is still not planned due to the limited budget and the exorbitant cost involved in laying our own infrastructure.

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## SERVICE PORTFOLIO

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The NREN has deployed several digital services some of which have been commissioned officially for use by the member institutions and others are being tested. These services include:



### **Network monitoring and management as a service:**

Which involves implementing network monitoring and managements systems for our customers at our data center or their premises. This will help ensure availability and reliability and to hold SomaliREN and its vendors accountable for their services.



### **Video conferencing service:**

this service is being tested and is planned for demonstration at our annual meetings this year. The purpose of this system is to allow the universities to have an alternative to the expensive proprietary solutions and cloud services such as Zoom.



### Virtual Training Labs:

SomaliREN has set up a virtual training lab for networking and systems administration for the benefit of the member universities' ICT faculties and departments. The platform has been used for SomNOG4 training this year.



### OCW Mirror Site

SomaliREN's has set up the infrastructure for hosting MIT's Open Courseware program whose agreement has been signed last year. The system, which will allow the Somali students and faculty members to access over 2000 recorded MIT courses, will be officially commissioned in mid-2020.

## TRAINING AND CAPACITY BUILDING

SomaliREN has organized 6 capacity building activities on networking and systems administration, as well as research. The training activities organized included the following:

- SomNOG 4 Systems
- SomNOG4 Network Infrastructure
- Campus network operations
- ICT Directors Forum
- Campus Network Design and Implementation

In order to increase the number and formats for capacity building activities, plans for an online training platform have been completed. The system will go live in 2020 as well.



- SomaliREN received sponsorship for staff training at UbuntuNet Conenct 2019 in Madagascar.
- SomaliREN sponsored its head of systems to participate in the AfNOG2019 workshop.
- Research training with the Carpentries to train over 25 researchers on data analysis and visualization was organized at the University of Hargeisa in February 2019.



## DIRECT ENGINEERING ASSISTANCE ACTIVITIES



SomaliREN continuously supports its member universities in designing and building strong campus networks, and also engages in advocacy on ICT infrastructure investment prioritization. The following institutions benefitted from direct engineering assistance activities ranging from developing the university's ICT strategic plans to actually building their campus networks or supporting the implementation:

- *Mogadishu University*
- *SNU*
- *JUST*
- *East Africa University*
- *Benadir University*
- *University of Hargeisa*
- *Gollis University*



## COMMUNITY ENGAGEMENTS

SomaliREN has been more involved with its partner communities and stakeholders in 2019. The ICT directors forum has been organized for the representatives of the member universities to brainstorm strategies for effective digital transformation in our universities.

SomaliREN has also worked closely with the Ministry of Post, Telecommunications and Technology as we did previously and through them are working on supporting the Abudwak Campus of the Somali National University. SomaliREN contributed to the training of ministerial staff in network design and implementation focusing on routing and switching using Cisco equipment. We have also collaborated with the UbuntuNet to support the formation of the NREN of Mauritius and have taken part in the consultation meetings that will lead to the introduction of yet another NREN into the UA community.

SomaliREN was a co-organizer of SomNOG4, the premier community of the Somali network operators, engineers and administrators. The 7 day activities aimed at training 70 network and systems engineers in network and systems implementation and operations; and has also brought together industry stakeholders to discuss the theme "Digital Somalia: laying the foundations for the next economy".

## CONSULTATION MEETINGS

SomaliREN organized consultation meetings in Mogadishu on issues that are of concern to the higher education and research institutions. The main issues discussed in most of the meetings revolved around curriculum harmonization, the issue of the higher education commission and the accreditation of our member universities by the newly formed bodies, the development of ICT capabilities within the universities, and forming communities of practice.

# Governance



SomaliREN considers a transparent and robust governance system the critical foundation for its success. The governance charter and the organizational constitution define the following organs:

### **Council of Members:**

is the highest-level organ comprised of representatives from the member institutions. The Council of Members convene annually for the Annual General Meeting and related activities and are mandated to elect the board of trustees and hold them accountable.

### **Board of Trustees:**

is an elected body of nine members and the CEO, as an ex-official member, are entrusted with charting the strategic direction of SomaliREN. The chairperson of SomaliREN heads the board.

### **Executive Committee:**

is a standing sub-committee charged to make strategic decisions as needed on behalf of the board. This committee is made up of the chairperson, the two deputy chairs and the CEO.

### **Secretariat:**

is the operational organ of SomaliREN, and is responsible for the day to day activities of the organization, and for implementing the strategies and policies set by the board.

SomaliREN considers a transparent and robust governance system the critical foundation for its success. The governance charter and the organizational constitution define the following organs:

## Board Members

SomaliREN Council of Members comprises of the heads and representatives of the member institutions. The following leaders in the higher education and research sector currently serve the board for the term 2019-2021:



Prof. Abdirizak Mohammed Aden  
President, Nugaal University  
Chairperson, SomaliREN



Eng. Mohamed Ahmed Mohamud,  
President, Jamhuriya University of  
Science and Technology



Dr. Mohammed M. Hassan  
President, Benadir University  
Deputy Chair, SomaliREN



Prof. Mohamud H. Mohammed,  
President, Puntland State University  
Deputy Chair, SomaliREN



Dr. Suleiman Abdi Dirir,  
Vice-Chancellor, University  
of Burao Member



Prof. Mohamed Bile Hashi,  
President, Kismayo University



Eng. Ahmed Kheyre Gutale,  
Board Member, Galkayo  
University Member



Eng. Abdullahi Bihi Hussein,  
Chief Executive Officer,  
Ex-officio Member

## Council of Members



Prof. Abdirizak Mohammed Aden  
President, Nugaal University  
Chairperson, SomaliREN



Dr. Saeed Ahmed Hassan,  
President, Gollis University



Dr. Mohammed M. Hassan  
President, Benadir University  
Deputy Chair, SomaliREN



Prof. Mohamud H. Mohammed,  
President, Puntland State University  
Deputy Chair, SomaliREN



Ahmed Abdillahi Boqore,  
DVC, Amoud University



Dr. Ibrahim Mohammed Mursal  
President, Mogadishu  
University



Eng. Abdikarim H. Jama  
Vice President and Provost,  
City University of Mogadishu



Mr. Abdullahi Mohamud Mohammed  
VC, Public Relations  
University of Somalia



Prof. Dahir Hassan Abdi  
Rector, SIMAD University



Prof. Mohamed Bile Hashi  
Rector, Kismayo University



Dr. Mohamud Yussuf Muse,  
Vice Chancellor, University of  
Hargeisa



Prof. Adam Sheikhdon Ali  
President, East Africa  
University



Dr. Awil Yasin,  
Board Member, Galkayo University



Dr. Abdullahi Shaba,  
VP, Jazeera University



Dr. Omar Osman Hersi  
DVC, University of Burao



Dr. Mohamud Ahmed Jimale,  
VC, Somali National University



Eng. Mohamed Ahmed Mohamud,  
President, Jamhuriya University of  
Science and Technology



Prof. Abdirahman Sheikhdon Ali,  
President, Garowe Teachers  
Education College



Prof. Mubarak Ibrahim Aar,  
President, Beder International  
University,



Prof. Abdullahi Sheikh Hassan,  
President, Red Sea University



Mr. Mursal Saney,  
Deputy Director,  
The Heritage Institute for Policy Studies

## THE EXECUTIVE COMMITTEE



Prof. Abdirizak M. Aden  
President, Nugaal University  
Chairperson, SomaliREN



Prof. Mohamud H. Mohammed  
Vice Chancellor, Puntland  
State University  
Deputy Chair, SomaliREN

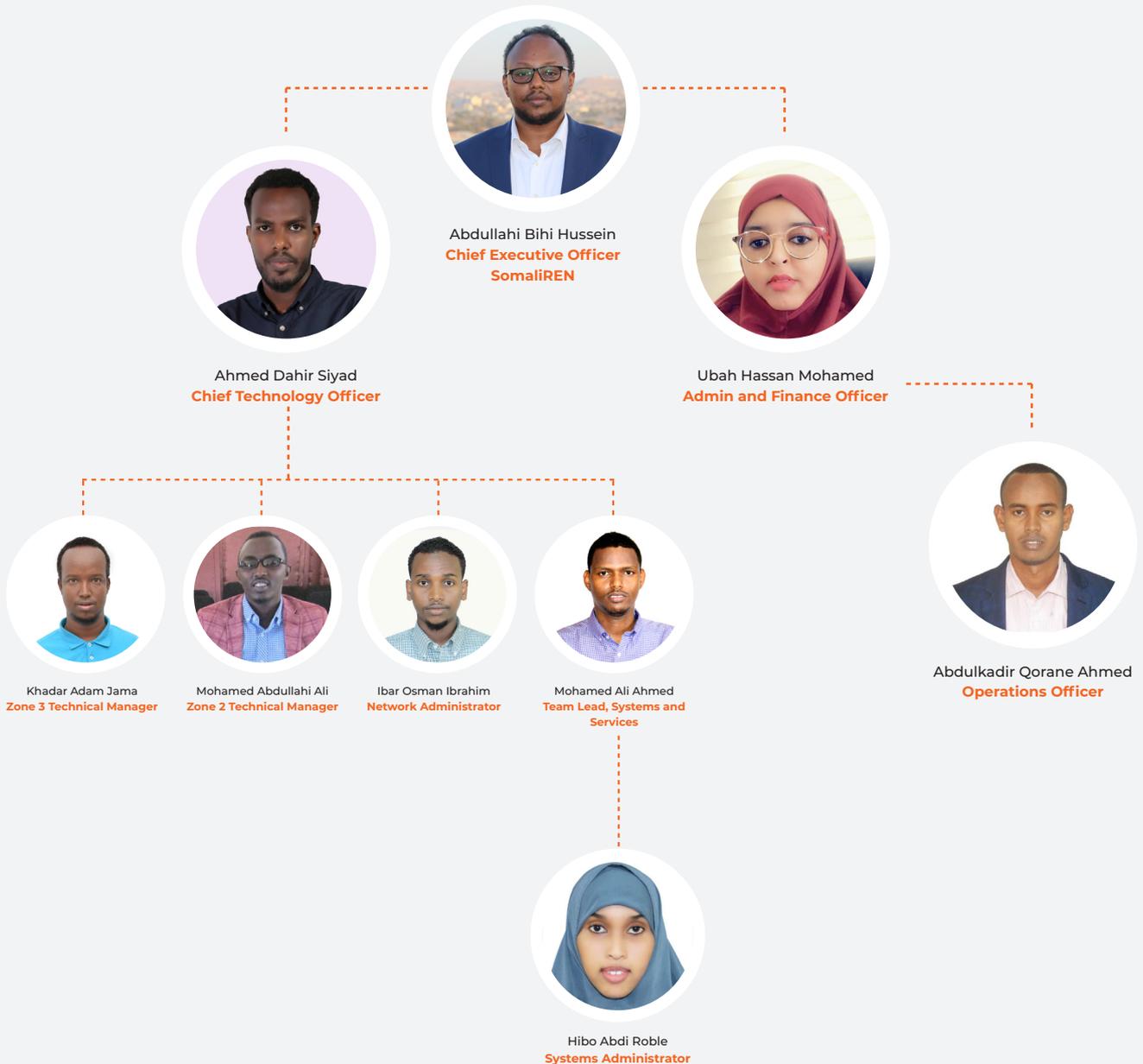


Dr. Mohammed M. Hassan  
Rector, Benadir University  
Deputy Chair, SomaliREN



Abdullahi Bihi Hussein  
Chief Executive Officer  
SomaliREN

## THE SECRETARIAT



## MEMBERSHIP ISSUES

SomaliREN's membership has grown up to 21 intuitions in 2019 and still continues to maintain a policy of open membership with the condition that the interested universities and research institutions fulfill the requirements for the membership. A new membership policies and procedures document has been drawn to address some issues of ambiguity regarding the authority and responsibility of the parties throughout the membership application process. The document is expected to be ratified in the annual board meeting and the annual general meeting of the council in February 2020.

Currently 3 new member applications are in the pipeline and the ratified membership policies and procedures will be applied in this round of applications. The proposed associate membership and new categories of institutions that can apply will be determined in the upcoming meetings.

Here is the list of the current member institutions as of December 2019.



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## OPPORTUNITIES AND CHALLENGES

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As a lean organization, SomaliREN must be agile and dynamic to adapt to the continuously changing external environments and internal capabilities. In 2019, the two sectors that crosscut SomaliREN's priorities and core mission areas had seen developments that affect the future of the NREN. Besides, the Somali universities and research institutions continued their growth and compliance with the requirements of international bodies. In terms of digital transformation and ICT infrastructure and capabilities, the universities have increased their investments into ICT, although the needs far exceed the universities' financial abilities. A quick environmental scan to identify opportunities and challenges, and an inward look into the organization's strengths and weaknesses in the year 2019 has uncovered the following:

### Strengths:

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- Strong organizational sustainability as a result of the growing bandwidth consumption
- Organizational systems, policies, and procedures in place
- Capable, motivated secretariat including technical staff
- Committed member institutions with a strong sense of ownership

### Weaknesses:

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- Limited staff to meet the rapid growth demands of the organization
- Limited communications capabilities to attract meaningful funding including the human resources and equipment
- Inadequate funding for ICT infrastructure and the campus level affects the reliability and utility of the connectivity and other ICT infrastructure to the end-user communities

### Opportunities:

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- The expected arrival of additional submarine cable landing station promises improved international connectivity
- Regulation of the higher education and the formation of the higher education commission will drive the adoption of ICT in education and research
- AfricaConnect3 implementation expected to start soon will provide SomaliREN with improved access to international research and education networking connectivity among other benefits
- Increased awareness of the role of SomaliREN in the higher education and research sector, and especially within the government ranks
- Potential of a financing source for connectivity based on the student populations at the universities.
- The passing of relevant laws and the regulation of the telecommunications industry will contribute positively to the quality of international and local connectivity

### Challenges:

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- Support of the international donors and its impact curtailed by the lack of meaningful cooperation with those responsible for the project management resulting in wastage and misuse of resources
- The rapid expansion of the network across the NREN's three zones requires more resources to be deployed
- Funding limitations for the homegrown strategic initiatives developed with the help of the universities
- Lack of a national backbone and limited intra-city fiber infrastructure will delay the achievement of the network vision

# SomaliREN in Numbers

## Connectivity



**20**

Members connected  
(20 Universities and 1  
research institution)

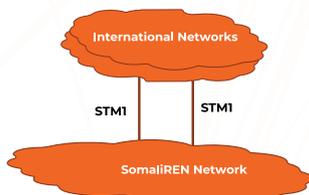


**50**

Campuses Connected

**430Mbps**

Aggregate Upstream traffic.



**4**

Upstream providers with  
full BGP sessions.

## Communities

**21**

Member Institutions by  
late 2019. 20 universities &  
1 research institution.



**2**

Communities of practice  
hosted and supported.



**3**

Communities of practice  
and under development.



**50,000+**

students and faculty  
population served.



**6**

Universities benefitted  
from the direct engineering  
assistance programme. Free  
network and systems redesign and  
implementation projects completed.

## Impact



**50%**

Subsidized connectivity  
cost per Mbps. Now the  
universities are paying 50%  
of the current market price  
per Mbps



**80%**

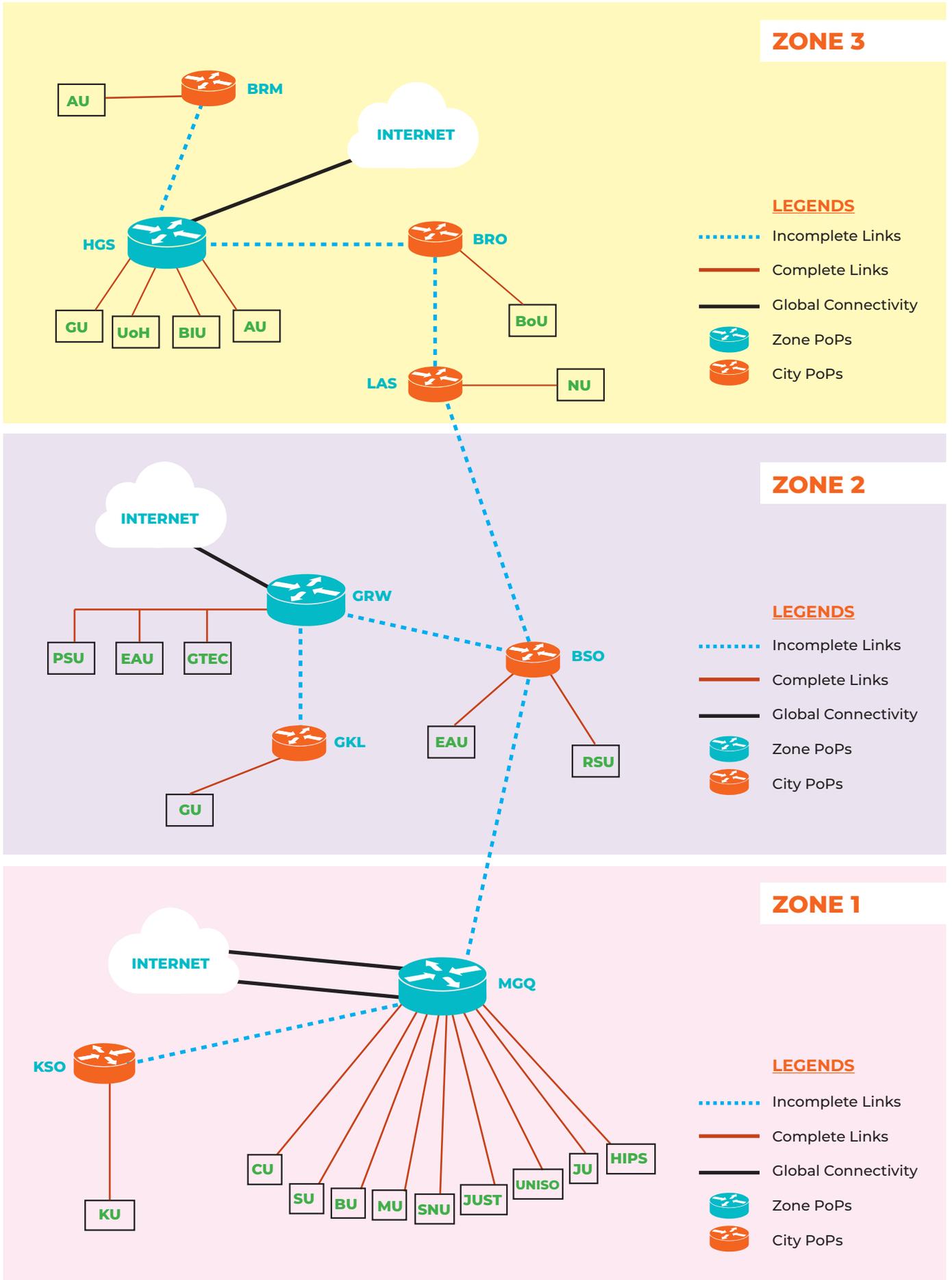
Bandwidth consumption  
growth  
by the member universities.



**6**

Innovative  
projects under  
development.

# HIGH-LEVEL VIEW OF SOMALIREN NETWORK BACKBONE



# ACHIEVEMENTS

## Significant milestones achieved in the connectivity rollout

As of the time of this report, all the member institutions have received international connectivity from the closest city PoPs. Over 50 campuses have been connected to the Internet via our PoPs with the majority of these campuses being located in Zone 1 (Mogadishu and nearby cities). The following table summarizes the details of the 3 zones.

Zone	Number of campuses receiving international capacity	Interconnected campuses (receiving local connectivity)	International Aggregate Capacity
Zone 1	36	36	300Mbps
Zone 2	7	4	50Mbps
Zone 3	6	5	85Mbps
<b>Total</b>	<b>49</b>	<b>45</b>	<b>435Mbps</b>

SomaliREN classifies its connectivity services as local and international. At this point, institutions receiving local connectivity refer to those connected directly to a zonal PoP or a City PoP. The average local capacity connecting the institutions to the local network is 400Mbps, while the average international capacity ranges from 10Mbps to 50Mbps per campus with an average of 20Mbps.

The connectivity services are considered the foundation for all the services and initiatives SomaliREN delivers or plans to deliver to its member institutions. So far, the connectivity has improved within the campuses and the bandwidth consumption has increased by 80% as a result of the subsidized connectivity costs. However, the NREN still has a long way to go to continuously subsidize and keep pace with the changing connectivity prices in the country.

## Services piloted and ready to move to production

Work on the development of new services that address current needs of the member universities has been completed. As presented in the services portfolio section of the report, the following services are ready to be delivered to our member institutions:

- *Network Management as a Service: hosted within our data centers, the members can benefit from the network monitoring and management systems implemented by our NOC to effectively manage their connectivity and systems without having to host and operate the systems themselves.*
- *Video-conferencing platform: the roll-out and trials of the video-conferencing platform based on BigBlueButton has been completed. The system has been piloted in the annual meetings and has shown to be reliable.*
- *Virtual Training Lab: used in SomNOG4 annual technical workshops was stable and reliable. It eliminates the need to use hardware systems and network equipment in training network engineers and administrators. The system will be introduced to the ICT and computing faculties of the member universities in early 2020.*
- *E-Content Services: after signing an MoA with MIT's Open Courseware program, the OCW mirror site is set to serve as the seed content for the digital educational and research content services. Curation of other content is still in progress and will continue as long as we have open access content that we can host within our data centers and share with the community. The hosting of this content will enhance the quality of education and research and address the issues surrounding the limited access of educational and research content.*

## Awards and recognition

This year, SomaliREN has received awards for recognition as the fastest growing emerging NREN in the region. The UbuntuNet Alliance has given this award during the UbuntuNet Connect 2019 conference in Madagascar.

The Arab States research and education network has also awarded a similar recognition for the work SomaliREN is delivering to its community. SomaliREN has also formally joined as a shareholder with ASREN, marking the culmination of a process started in early 2012 by Mr. Dahir Hassan Abdi, the former CEO of SomaliREN.



## TOWARDS 2020

SomaliREN has reached a stage in its development trajectory where significant progress has been made in the provision of connectivity and interconnecting the member institutions. The time has come to think 'beyond the connectivity' and build on the network infrastructure and services already deployed. The connectivity and information technologies, in general, are a means to an end; and in the context of NRENs, this end is about the improved quality of education and research.

Taking advantage of the power of the community and the social network that makes this organization what it is, innovative and timely sustainable solutions for the issues facing the higher education sector is required. In line with SomaliREN's strategic plan and building on the accomplishments and groundwork completed in the previous years, the following areas will be considered priority activities in 2020:

Developing organizational communication capabilities	As a change agent, SomaliREN should practice effective communication and the improvement of communication capabilities, including the skills of the management team and access to equipment and tools.
Research skills and output development	Increasing the number of research skills training activities, the implementation of research repositories for the universities on Invenio, and advocacy campaigns on research output quantity and quality improvements.
Enhancing the e-Readiness of higher education and research institutions	Introducing and implementing digital transformation initiatives to strengthen the e-readiness of the member universities, including the strengthening of campus networks and services.
Building diversified sources of funding for a more sustainable future	Developing concept papers and proposals for projects that support the strategic goals and the mission of SomaliREN to secure funding from the relevant donor agencies
Building and empowering communities of practice	Continuing the support of existing communities and supporting the formation of new ones as per the proposals from the member universities consultation meetings.
Engaging in strategic initiatives to position SomaliREN as a key change-maker	Launching the strategic initiatives SomaliREN was working on in the past two years, and introducing new ones including the Unified Graduates Directory, and the Higher Education and Research Database
Developing existing and new e-infrastructures	Improving the existing network infrastructures include the upgrade of some of the wireless links to fiber, securing support for and implementing inter-city links in Zones 2 and 3, and connecting the remaining member institution to Zone 1.

The activities and goals proposed for 2020 will serve as a critical component of the year's operational plan. These should take the organization closer to the realization of its Grand Vision 2025, as outlined in the four-year strategic plan.

