2021

PROFILE

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More than a decade of growth, learning and innovation

Over the past decade, we grew from a consortium of Somali universities that came together to combine their strengths, purchasing power and influence to better the Somali education sector to an innovative NREN that is not only digitally transforming the education sector but also driving digital transformation nationwide. Founded in early 2009, the Somali Research and Education Network (SomaliREN) served as a platform for collaboration and as the voice for the Somali higher education institutions to tackle the issues of a nascent, post-conflict education sector - scarcity of resources to enable the universities to deliver quality education that was critical for the socio-economic recovery.

SomaliREN is a non-profit, membership-based grassroots organization formed by the member universities.

Following a transparent and inclusive membership process, the organization has grown to over 24 member institutions.

Headquartered in Mogadishu, the services of the organization and its representation cover the whole country. As a National Research and Education Network (NREN), the

Membership in regional organizations

What we are trying to accomplish

Our Purpose

Even after three decades of struggle to recover the most essential social services as a nation, the Somali education sector still has a lot to catch up. The world has gradually been experiencing digital transformation, and ours started early on in the 1990s when we connected to the Internet. It is only the last 10 years that the education sector has engaged in digital transformation to improve the quality of education and research across the sector.

Specific issues affecting the Somali higher education sector position technology and digital transformation as critical success factors and prerequisites for improved quality education, human capital development and global relevance. These issues include the scarcity of qualified lecturers and research supervisors for certain disciplines and especially in the STEM-related courses, limited access to education and research resources, inexistent research collaboration beyond our borders, and the ability to tackle education disruptions due to unforeseen circumstances

such as the COVID19 pandemic.

SomaliREN is mandated and well-positioned to address these issues through innovative, stakeholder-centric, multi-disciplinary approaches that utilize modern technology capabilities. The purpose of our existence is to:

» **Enable locally-significant, and globally-relevant research collaboration among our universities and with their peers around the world**
» **Improve the quality of education through the facilitation of knowledge transfer and provision of access to research and education content**
» **Build communities of practices that form knowledge networks to collaborate on knowledge-sharing and knowledge production**
» **Drive fast and sustainable digital transformation in the Somali education sector**
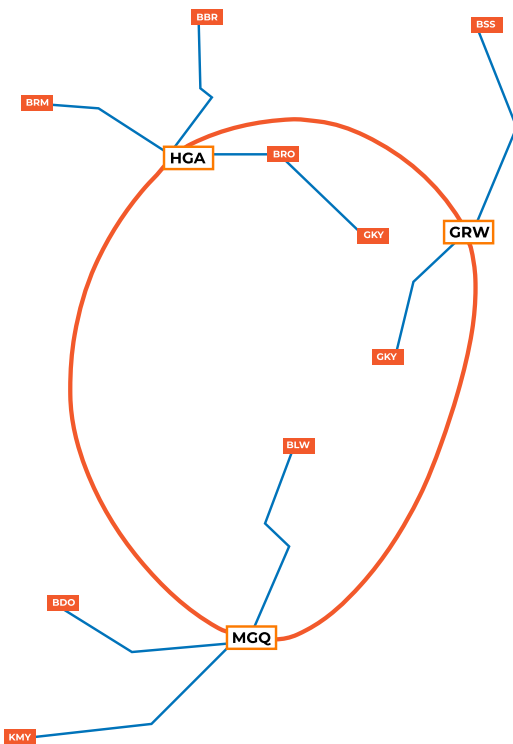
Our Strategy

Vision:

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

Mission:

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

Over 40
INSTITUTIONS CONNECTED

2Gbps+ CAPACITY DELIVERED

LEGEND
☐ Main PoP ◼ City Pop
— SomaliREN Network Backbone
— City Connections

Strategic Focus

E-infrastructures are the foundation:

As an NREN, SomaliREN puts tremendous emphasis on developing e-infrastructures and relevant know-how to build, operate, manage and utilize them. These include but are not limited to connectivity and Internet infrastructure for research and education, computing capabilities, research labs and technology-related resources built and operated for the benefit of the member institutions, and the research and education community at large.

A solid governance base to sustain growth:

Sustainable growth can only be built on a solid governance system to realize the vision of SomaliREN. To have this in place, accountability, transparency, and efficient procedures based on effective policies should be implemented on a rolling basis.

An innovative services portfolio that reflects our value proposition:

SomaliREN's service to the higher education and research institutions is packaged as a complementary set of services that address issues and needs in our community. Innovation is the key to addressing the dynamic needs of the higher education and research communities.

Strengthening research capabilities:

Research development is at the core of SomaliREN's mission. We enable institutions and researchers to produce and consume research and education content.

People before everything else:

We believe that the NREN is the people who make it happen. Developing the competencies and capabilities of the people at our member institutions is a priority.

Our Value Proposition

SomaliREN, as an NREN, is determined to drive digital transformation in the Somali education sector; and has made significant strides towards its key milestones to position technology and related digital skills as key drivers of quality in the education sector. The following unique characteristics of SomaliREN position the organization to serve the education and research communities, universities and education-focused institutions:

» **Organizational identity:** As non-profit, non-governmental community-led effort that transcends political boundaries to serve the Somali research and education institutions and their communities, SomaliREN's services have a wider national reach, and is well-positioned to drive digital transformation, digital readiness and digital literacy across the nation.

» **Community-focus:** owned and led by the community of member institutions, the NREN is a collaborative, consultative platform where issues related to the education sector are addressed, analyzed and resolved. The governance structure and related processes benefit from this community-centric existence, and ensures that all interventions produce the expected outcomes and behavioral change in the sector.

» **Technological capabilities:** as an NREN, technology is the main tool and capability we use to resolve socio-economic issues by strengthening the education sector. While connectivity and access to education resources is the main theme now, SomaliREN is helping build open access repositories, and data products that will help stakeholders come up with sound decisions with regards to the programming of interventions.

» **Innovation drive:** We have several platforms that bring together stakeholders from various education-related professions to listen to the needs and wants of the member institutions, and from there embark on the pursuit of innovative, technology-based solutions.

» **Power of demand aggregation:** as a community, SomaliREN is capable of not only bringing together a diverse brain power, but also helps aggregate demand of services and solutions to leverage the economies of scale opportunity provided by the very nature of our existence - a consortium of educational institutions.

Roadmap to Success

Services, Initiatives, Programs and Projects		
e-Infrastructures Pillar (Previously connectivity)	Content Pillar	Communities
Governance and Legal Foundation		

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

Management Structure

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.
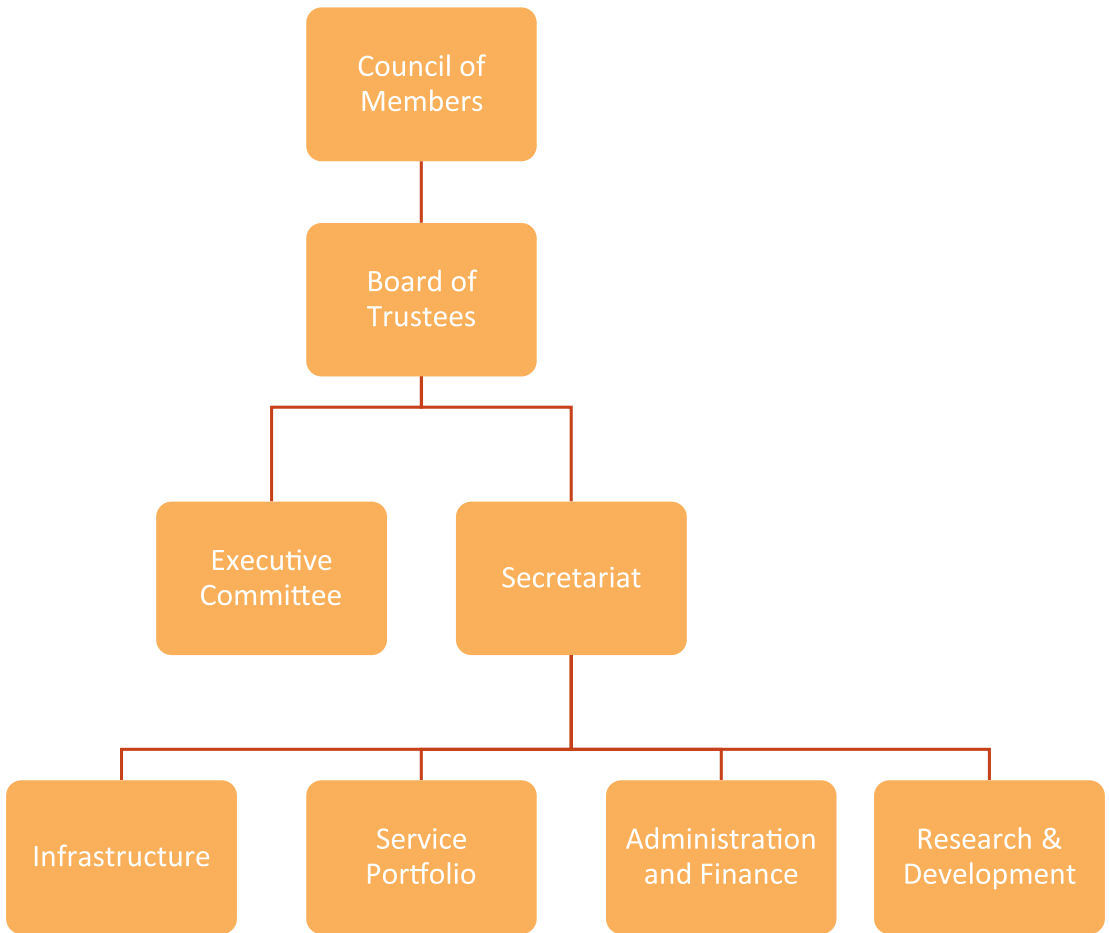
Executive Committee:

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:

Council of
Members

Board of
Trustees

Executive
Committee

Secretariat

Infrastructure

Service
Portfolio

Administration
and Finance

Research &
Development

What We Do

Areas of work

SomaliREN's work currently focuses on the following areas:

Digital Transformation for Education

SomaliREN's priority in the previous and formative years changed gradually but the focus on digital transformation as a way of improving the quality of research and education has not waivered much. We have supported our member institutions to develop their ICT strategies and policies, improve their ICT infrastructure and governance, and access enhanced, subsidized connectivity.

Research Capacity Development

Improving the quality and quantity of research output and educational resources is a core component of SomaliREN's mission. We organize researchers as communities of practice, facilitate knowledge-sharing, and promote research development within our member universities and the higher education institutions at large.

Developing Human Capital and Knowledge Networks

We advocate for hands-on, skill-based learning at our universities. To develop human capital, bridge the skill gaps that exist in certain areas, and improve employability, we support the communities of practices such as SomNOG to organize annual workshops, and capacity building activities that benefit over 200 participants each year. We also drive skill-based learning opportunities through the promotion of skill-based capstone projects through the Final Year Projects 2.0 initiative.

Current Initiatives

SORER

The Somali Research and Education Repository (SORER) is an open access, FAIR-compliant research and education repository that aims to be the home of all research and education-related content produced by our universities, research institutions, and partners. The repository is also the content-base for the plagiarism-checker being developed for the Somali higher education institutions. SORER, Mirror Site Hosting Project and the Plagiarism-checker are part of the Repository Services Initiative.

EduSpot

To leverage the unused capacity of SomaliREN's connectivity in the evening and the hotspot technology available at the campuses and around the main cities, EduSpot project builds on identity federation services, the repository services and SomaliREN's wireless infrastructure to deliver access to education and research content. TheEduSpot project will also serve as a test-bed for OpenWifi and open wireless networks.

REConnect

The Somali universities have been focusing on improving the quality of education and research in the last decade, and SomaliREN's work has contributed to these efforts in several areas including the development of ICT infrastructure and capabilities, and also connecting the universities with qualified professors, lecturers and researchers. The Research and Education Connection (REConnect in short) supports the efforts to improve the quality of education and research by developing the facilities to match professors from the diaspora to Somali research and education institutions.

Repository Services Initiative

The goal of the initiative is to curate, host and provide access to educational and research content. The platforms for hosting and delivering the research and education content have been implemented with SORER and MIT OCW content mirror hosting, and other services such as the plagiarism-detection tool and statistical reporting of usage are under development.

Higher Education Information Portal

SomaliREN's council has given the green light to build an information portal for the Somali higher education which will be used to collect statistical data on the Somali higher education institutions as well as provide graduate verification services to potential employers and other higher education institutions.

Researchers' Lounge

SomaliREN has most recently designed a modern knowledge-transfer, live-streamed event on research capacity development. The program is a monthly online event that brings together experienced researchers and aspiring researchers to facilitate an effective knowledge transfer. This event will be recorded and stored in the SORER platform.

Our People

The fast, sustainable growth of SomaliREN as an organization and as an NREN is credited to our team of committed, creative and self-driven professionals who believe in its mission. Our organizational culture has instilled a learn and innovation-friendly environment where the challenges and opportunities identified in the Somali education sector are paired with the unique yet complementary skills, expertise and knowhow of our team members to come up with creative solutions that last.

As an equal-opportunity employer, SomaliREN encourages professionals to join the secretariat offering opportunities for self-development and heartwarming contribution to society.

Our organizational culture is defined by two main characteristics:

» **Continuous growth and learning which requires each member of our team to demonstrate continued learning effort through the pursuit of relevant training and certification in relevant work area**
» **Independent supervision which gives our people the responsibility to drive oneself to excellence and contribute to the mission of the NREN. Each member is mentored by his supervisor or a team member better versed in the area of assignment.**

The Executive Committee

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

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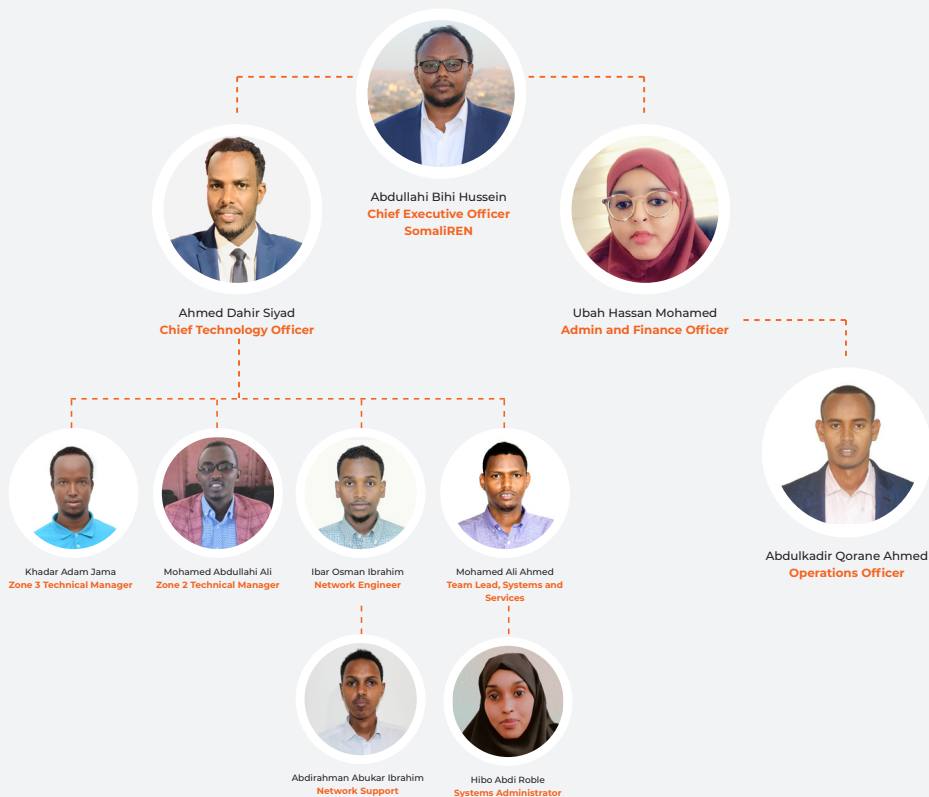**Deputy Chair, SomaliREN**

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

Abdullahi Bihi Hussein
Chief Executive Officer SomaliREN

The Secretariat

Abdullahi Bihi Hussein
**Chief Executive Officer
SomaliREN**

Ahmed Dahir Siyad
Chief Technology Officer

Ubah Hassan Mohamed
Admin and Finance Officer

Khadar Adam Jama
Zone 3 Technical Manager

Mohamed Abdullahi Ali
Zone 2 Technical Manager

Ibar Osman Ibrahim
Network Engineer

Mohamed Ali Ahmed
Team Lead, Systems and Services

Abdulkadir Qorane Ahmed
Operations Officer

Abdirahman Abukar Ibrahim
Network Support

Hibo Abdi Roble
Systems Administrator

Partnerships and Collaborations

UbuntuNet Alliance

ASREN
Arab States Research and Education Network

THE WORLD BANK
IBRD • IDA | WORLD BANK GROUP

Ministry of Communication and Technology

Ministry of Education, Culture and Higher Education

NPTEL

kenet
Kenya Education Network

MIT OCW

RENU

UNIVERSITÀ degli STUDI di CATANIA

Our History

SomaliREN joined the UbuntuNet Alliance, the regional research and education network for Eastern and Southern Africa. The fledgling NREN would start its journey to transform the Somali higher education sector's technological capabilities. The initial network infrastructure plans, business model and funding strategies would be developed a few months later.

SomaliREN also participated in the AfricaConnect after signing the agreement in Mozambique after the World Bank Group supported counterpart funding requirements under the ICT Sector Support project implemented by the Ministry of Communications and Technology.

SomaliREN joins the UbuntuNet Alliance November 2009

Signing of Africa Connect 2 Agreement November 2015

Founding of SomaliREN August 2008

After several consultation meetings and study tours in the region and Europe, 6 Somali universities signed an agreement to form the Somali Research and Education Network. The goal was to leverage the combined purchasing power and demand aggregation to solve critical infrastructure issues for the education sector.

ASREN welcomes SomaliREN as a member December 2011

SomaliREN joined the Arab States Research and Education Network(ASREN) and later in 2018 received its shareholder agreement. SomaliREN continues to be an active member contributing to the regional REN's activities.

Activation of connectivity services July 2018

The connectivity services which consisted of the provision of Internet access and local connectivity between the member institutions was completed. Over 50 campuses for 18 universities and research institutions have been connected to serve an aggregate of 30,000 students, researchers and faculty members.

SomaliREN's backbone has been reconfigured with an IP dual-stack connectivity as a move to provide end-to-end IPv6 connectivity to the member universities. This project will create opportunities for research in itself, as well as allowing the NREN and its members to be future-ready.

Deploying IPv6 Backbone April 2019

As part of the Research Repository Services Initiative which aimed to provide access to research and education content, SomaliREN launched SORER - an open access FAIR-complaint repository with the support of experts from the University of Catania.

Launching of the Somali Research and Education Repository December 2020
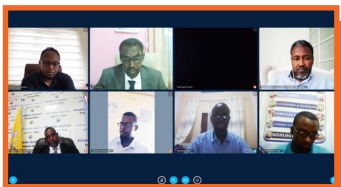

The identity federation services and eduroam will help the faculty members and researchers access research and education resources locally and internationally. The service is also a prerequisite for accessing SomaliREN's services and content portals.

Eduroam and SomaliREN´s Identity Federation Service Launched July 2021

Launching of SomaliREN Video-conferencing Platform March 2020

Launched during the annual council meetings of SomaliREN, the video-conferencing platform was initially designed for minimal traffic to host research and education related meetings and online seminars. When the COVID19 pandemic hit the universities hard, the platform helped the universities cut down costs on video-conferencing solutions, and also required an upgrade to handle the growing demand. The platform was scaled using equipment donated by some of the member institutions and cloud services provided by the UbuntuNet Alliance.

MIT OCW Mirror Site Hosting Launch June 2021

SomaliREN also launched a mirror site service starting with content from MIT's Open CourseWare program. This resource will allow SomaliREN to provide access to students and faculty members at the campus, and later in the comfort of their homes by the EduSpot project of SomaliREN.

Joining MANRS-Complaint Operators March 2021

SomaliREN becomes MARS-compliant to improve the routing security of its own network and that of the Internet in general, making it the first operator to do so in the country. Capacity building and knowledge-sharing activities related to Internet routing infrastructure security still continues in the country.
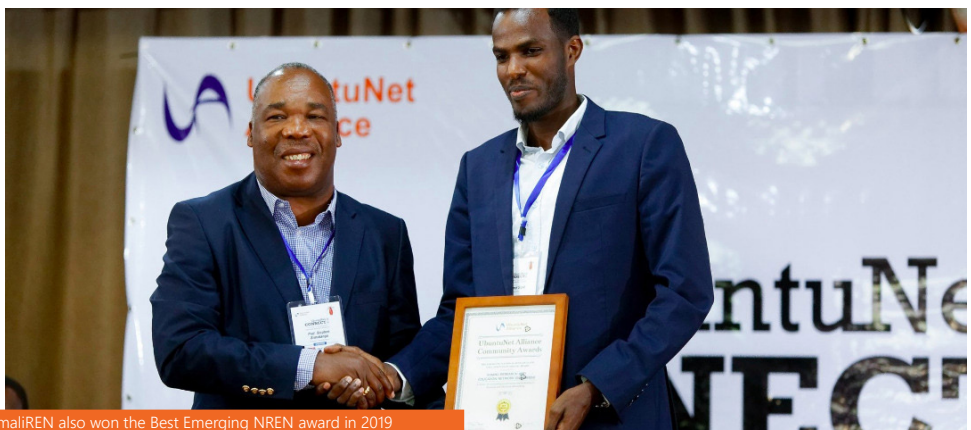
Awards and Recognition

SomaliREN has received recognition awards for its success as a national research and education network from ASREN and the UbuntuNet Alliance representing the Arab world and Africa regions respectively. It is a beacon of hope that continuously strives to draw a good image of the recovery of Somalia and the Somali people.

» **UA award**
» **ASREN**

ASREN recognized SomaliREN for its fast-paced growth and for its contribution to the ASREN community

SomaliREN also won the Best Emerging NREN award in 2019 during the UbuntuNet Connect annual event.

SomaliREN Moments